NEW ENGLAND HADDOCK FISHERY BIOSTATISTICS--1956



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NEW ENGLAND HADDOCK FISHERY BIOSTATISTICS--1956

by

John R. Clark and Frank A. Dreyer



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NEW ENGLAND HADDOCK FISHERY BIOSTATISTICS--1956

by

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ABSTRACT

A statistical review of the haddock fishery of New England banks (Subarea 5 of the International Commission for the Northwest Atlantic Fisheries) is presented for the 1956 haddock year. Estimates of total fishery removals are given for scrod and large haddock, both landed and discarded at sea, by month and area of capture. The estimated age and length compositions of the total haddock discard for 1956 are given. Age and length compositions are estimated by month for haddock landed from Georges Bank (ICNAF Subdivision 5Z) and by season for haddock landed from the Gulf of Maine (Subdivision 5Y). Fishing effort and abundance estimates are given for Georges Bank by month.

INTRODUCTION

The haddock (Melanogrammus aegle-finus) is a gadoid fish that inhabits the Continental and Island Shelves of the North Atlantic Ocean. Although a close ecological associate of the cod, haddock are found in abundance neither so far south nor so far north. Along the North American coast the species is fished commercially from Cape Cod to the Grand Bank and in the Gulf of St. Lawrence.

This study is restricted to the fishing grounds of the Gulf of Maine, the Great South Channel, Georges Bank, and the Southern New England shelf. These grounds make up Subarea 5 (Subdivision 5Y and 5Z) as defined by the International Commission for the Northwest Atlantic Fisheries (ICNAF) sta-

tistical system (fig. 1). At present, only the United States fishes haddock extensively on these grounds; Canada takes only small quantities from 5Y.

Extensive studies of the New England haddock fishery and of the biology and habits of the species have been carried out since 1931. The biostatistical data resulting from these studies have been utilized in many publications and in forming the basis for international regulation of the haddock fishery through control of mesh size (Graham, 1952). The world-wide interest in the effect of the regulation and in many other aspects of the research program has led to an increasing demand for publication of the basic biostatistical data for New England haddock. To answer this demand, a regular series of biostatistical reports is planned.

The responsibility for studies of the Canadian and U. S. haddock fisheries throughout the Northwest Atlantic are

¹Presently employed at Marine Game Fish Research Center, Atlantic Marine Laboratory, U.S. Fish and Wildlife Service, Highlands, New Jersey.

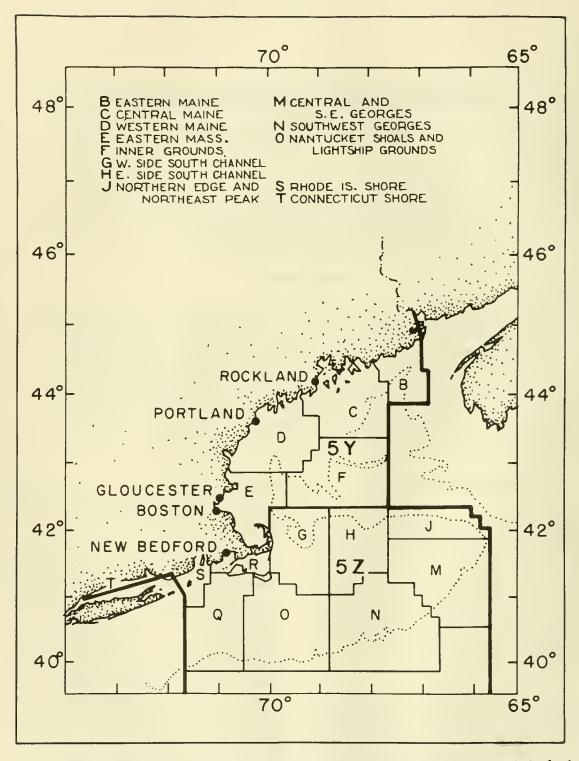


Figure 1.--Statistical Subdivisions of New England fishing grounds as defined by the International Commission for the Northwest Atlantic Fisheries.

shared by the two countries through a cooperative program sponsored by ICNAF. At present, the principal responsibility for the biostatistical program for ICNAF Subdivisions 4X, 5Y, and 5Z is carried by the Bureau of Commercial Fisheries, Biological Laboratory at Woods Hole. Responsibility for Subdivisions 4R to 4W is carried by the St. Andrews Biological Station and for all of Subarea 3 by the St. John's Biological Station, both of the Fisheries Research Board of Canada. Haddock data and material collected by the agencies outside their respective areas of responsibility are exchanged at intervals.

The present report gives, in as much detail as practicable, a summary of the total removals of haddock from Subdivisions 5Y and 5Z during the 1956 haddock year. A basic account of the methods used in deriving the estimates is given by Schuck (1951).

The data are arranged by "haddock year" to conform most nearly to the seasonal physiological cycle of the fish. The haddock year differs from a calendar year by one month; i. e., it commences February 1 and ends January 31 of the following year. The seasonal arrangement of the haddock year devised by Schuck is used herein and is shown below:

Spring February, March, April
Summer May, June, July
Fall August, September, October
Winter November, December, January

To permit maximum usefulness of the data, Subdivision 5Y has been divided into northern and southern sections, and 5Z into eastern and western sections.

Most haddock caught are landed and sold for human consumption and these shall be of primary concern. However, two other categories of removals from the stock shall be considered: haddock too small to be marketed which are discarded at sea, and haddock taken in the industrial fishery.

FISHING METHODS

Otter trawls accounted for over 98 percent of the U. S. landings from 5Y and 5Z in 1956, the remainder being taken by handlines, longlines, and gill nets. Approximately 86 trawlers were engaged in the U.S. haddock fishery during 1956. About 35 of these were large otter trawlers (gross tonnage of 151 to 360 tons) which can easily range some 600 miles from port. The remainder were mostly medium trawlers (gross tonnage of 51 to 150 tons) which usually range no more than 300 miles from port. The few smaller trawlers engaged in haddock fishing usually range no farther than 75 miles from port. U. S. line trawlers, handliners, and gill netters mostly make 1-day trips. They do not venture far from their home ports and, consequently, fish only in the western parts of Subdivisions 5Y and 5Z.

THE CATCH

Haddock catches are nearly always separated (culled) into market categories of large and scrod. Large haddock weigh more than 2-1/2 pounds (gutted) and scrod haddock weigh from 1-1/2 to 2-1/2 pounds. Undersized haddock, those smaller than 1-1/2 pounds, are presumably discarded at sea because they are not of marketable size. This definition of market categories provides only an approximate standard and, in practice culling procedures vary considerably, particularly in response to changes in the relative price or abundance of large and scrod.

When undersized haddock (as small as 3/4 pound) are landed, they are marketed as scrod and thus included in landings statistics with scrod. The occurrence of undersized haddock in the landings has been negligible since the advent of the ICNAF mesh regulation in 1953.

The catch is culled by the fishermen before landing at the ports of Boston and Gloucester. Dealers typically cull the landings at other U. S. ports. Haddock are nearly always gutted by the fishermen at sea before landing. Small scrod haddock are occasionally landed "in the round" when unusually abundant.

Information on source of landings (area of capture) and fishing effort expended is obtained primarily from interviews with the captains or mates of the vessels. Landing and selling procedures are well-enough organized in Boston, where 80 percent of U.S. landings are received, to permit agents to obtain interviews of all trawler trips. The proportion of trips landed in other New England ports that are interviewed varies depending upon many circumstances of the landing procedure and the time of year, but averages about 70 to 75 percent. Landings from non-interviewed trips are assigned to area of capture on the basis of records from interviewed trips and incidental information obtained by the agents. Descriptions of interviewing procedure at New England ports are given by Rounsefell (1948 and 1957) and the haddock fishing grounds are outlined by Schuck (1952).

Discarded Portion

In some fisheries the portion discarded at sea by fishermen amounts to a substantial proportion of the total catch. Herrington (1936) estimated that 63 million small fish were discarded annually on Georges Bank alone during the early 1930's. The discard has been much less of recent years, particularly since the advent of mesh regulation; slightly over 400,000 small haddock were discarded on Georges Bank in 1956. Although the portion of the total catch consisting of discards is small at present, we have recorded it in order to make this study inclusive of all sources of removals.

The amounts discarded at sea are determined from fishermen's estimates obtained during interviews as described by Premetz (1954). Only Boston trawlers fish extensively on New England grounds in areas where small haddock are abundant. Small amounts of discard have been reported occasionally at New Bedford, but very rarely at other ports.

The total reported amount of discard for Subarea 5 is given in table 1 by month and subarea. No discard was reported for Subdivision 5Y in 1956. Most of the discard was accounted for by six vessels that were licensed to continue fishing with trawls having the small preregulation size meshes to serve as a control fleet in determining the benefit of the ICNAF mesh regulation (Clark, 1955).

Landed Portion

Quantities of haddock landed are obtained by statistical agents from dealer's records. The statistics collecting systems employed are adequate to guarantee a nearly complete summation of commercial landings of haddock for human consumption.

Total landings of haddock are listed in tables 2a and 2b by month, market size category, and statistical areaunits (see Rounsefell, 1948, for basis of establishing these area-units as shown in fig. 2). The landings are summarized by East and West sections for 5Z and North and South sections for 5Y in conformance with known differences in stock composition and fishing fleet composition.

Quantities landed are expressed in gutted weight to conform with usual reporting procedures. Infrequent landings of haddock "in the round" are converted to gutted weight by the factor 0.855. We have included only those haddock landed for direct human consumption. Haddock landed for human consumption are nearly always separated from other species and recorded and sold as haddock. Consequently, the total quantities of haddock landed for human consumption can usually be determined without risk of error caused by mixture with other species. However, one market situation exists that has not permitted identification of haddock. This involves a fishery for mixed groundfish at Gloucester, Mass.. wherein fish are iced and boxed at sea and unloaded at irregular hours directly into trucks for shipment to New York. Species composition cannot be

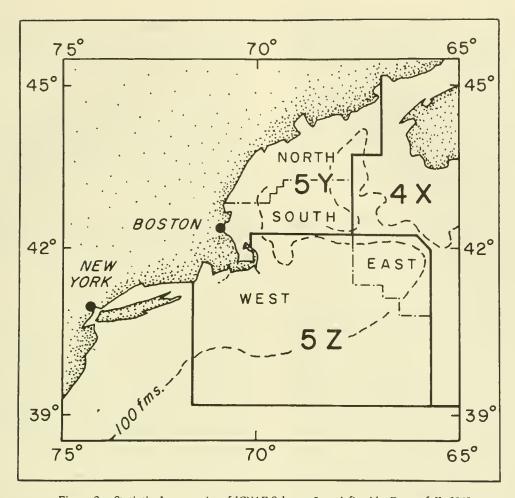


Figure 2,--Statistical area-units of ICNAF Subarea 5 as defined by Rounsefell, 1948.

determined and such landings have appeared in statistical records only as "mixed" fish.

Since species taken in the industrial (trash) fishery are not recorded separately in normal commercial practice, we must rely on estimates from samplings of the landings. From available sampling data (Edwards, 1958), we can derive an estimated 400,000 pounds of haddock in industrial landings for Gloucester and 13,000 pounds for New Bedford for the 1956 haddock year. No sampling data are available for the Cape Cod, Mass., and Maine industrial fisheries in which some haddock are taken. The total estimate of 413,000 pounds landed is thus a minimal figure.

The 1956 industrial fishery landings of haddock can be divided into areas of capture approximately as follows:

Statistical	Landings
area-units	(pounds)
E	280,000
G	120,000
R	13,000

LENGTH COMPOSITION OF CATCH

Length composition is determined by sampling procedures based upon sample lots consisting of 50 scrod or 100 large haddock selected at random from the landings. The lengths given herein represent the distance from tip of snout to the end of the median ray of the caudal fin (fork length). The measurements are recorded to the "centimeter below"; e.g., all fish from 39.0 to 39.9 are assigned to the 39 cm. interval. To obtain the true midpoint of the cm. interval, a correction of +0.5 cm. must be added. The standard procedure for estimating the length composition of haddock landings from each statistical areaunit is as follows:

- (1) Weight of sample is determined from the average weights of fish of each length for the period involved (month, season, etc.). Length-weight tables for various ICNAF subdivisions are given by Clark and Dietsch (1959).
- (2) Weight of the landings is divided by the weight of the sample to obtain a factor representing the proportion of the landings which was sampled.
- (3) Number of fish of each length in the sample is then multiplied by the factor obtained to estimate the total length composition for the landings.

The market categories of large and scrod are handled separately in the above procedure.

Discarded Portion

Samples were obtained at sea throughout 1956 aboard Boston large otter trawlers for the purpose of estimating the composition of the haddock discard. In all, 16 sampling trips were made during which 21,500 haddock were measured. The length estimates for total discard for 1956 in 5Z East and West are summarized in table 3.

Landed Portion

Length data for landed haddock were obtained by agents stationed at all major New England ports: Boston, Gloucester, New Bedford, Mass., and Rockland and Portland, Maine. The primary job of these agents was to interview trawler captains and sample catches of species taken in the otter trawl fishery. The composition of the trawler fleets and their fishing practices and areas of operation varied greatly from port to port, but the sampling coverage was sufficient to provide an adequate representation of the landings from each of our four

areas--Subdivisions 5Y North and South and 5Z East and West. A summary of samples of landed haddock is given in table 4.

Length compositions for 5Z are given in tables 5 to 17 for East and West sections by months and in summary for the haddock year. The data are given by month to serve the purposes of evaluation of the ICNAF mesh regulation. The figures given in these and the following tables on length and age composition of the landings are estimated total numbers of haddock of each length removed for human consumption by the entire fishery in the 1956 haddock year.

Length compositions for 5Y are given in tables 18 to 22 for North and South sections by seasons and in summary for the haddock year. The 5Y data are summarized by seasons to conserve space because a detailed monthly breakdown is not required as it is for subarea 5Z which supports a fishery that is much larger and has been under intensive study since 1931 and under regulation since 1953.

Too few samples were obtained from the industrial fishery to permit deriving length compositions of these landings.

AGE COMPOSITION OF CATCH

Haddock ages listed herein have been estimated from examination of scales taken from an area below the lateral line behind the second anal fin. The technique adopted is the usual one used in reading scales -- the narrow bands of circuli which are formed during each winter are counted to estimate the age of the fish. In conformance with past studies, February 1 is used as the standard birth date for all haddock. All fish older than 8 years are combined into the single category 9+. The methods used have been shown to provide reliable estimates of age for haddock at least through age 5. There is some evidence that the estimates for older fish, particularly those 8 years and older, may be less reliable but these older fish form a negligible part of the

removals. Detailed discussions of age reading techniques for haddock and problems of reliability are given by Arnold (1951), Clark (1958), Jensen and Clark (1958), and Kohler and Clark (1958).

Sample lots consist of the scales from 20 large or 15 scrod taken using a stratified random sample design.

The general method for determining age composition of the various units of removals is as follows:

- The readings from scrod and large haddock, for each statistical area are summarized separately by length and age, and the percentage age distribution of each length is calculated.
- (2) The number of fish of each length for the statistical area is broken down into numbers of each age for that length on the basis of the percentage representation of ages at each length in the sample.
- (3) Haddock and scrod compositions are then added directly together to obtain the total age-length composition for the landings from each statistical area.

This procedure is modified for 5Z where we have determined a combined age proportion for each season and used it to break down the length frequency for each month of that season.

Discarded Portion

Age compositions of discarded haddock have been estimated from scales obtained during the 16 sampling trips aboard commercial trawlers. Scales from 255 discard haddock were collected in 1956. Age compositions of the discard for 5Z East and West are given in table 23. The figures represent total reported discard of haddock from Subarea 5, since none were reported from 5Y.

Landed Portion

Age compositions for Subdivision 5Z for each month of the 1956 haddock year are given in tables 24 to 62, separately

for East and West sections and in summary for both sections.

Age compositions for 5Y for each season of the 1956 haddock year are given in tables 63 to 77, separately for North and South sections and in summary for both sections. The data are presented by 3-cm. groups for economy of space since, as previously mentioned, the 5Y material does not require such detailed presentation as that for 5Z.

The estimates given represent the total removals landed by the fishery for human consumption.

ABUNDANCE AND EFFORT

We have since 1931 routinely prepared estimates of haddock abundance and fishing effort for Subdivision 5Z. The methods for deriving these estimates are set forth in detail by Rounsefell (1957). Briefly, the procedure consists of deriving the catch per day's fishing for a standardized group of large otter trawlers. Total landings are then divided by the standard catch per day to estimate total effort in terms of standard trawler days fished. This procedure is not applicable to the 5Y fishery since the haddock fisherythere is of an entirely different nature being largely secondary to fisheries for other species and conducted by smaller and medium trawlers.

The estimates for 5Z are given in table 78 by month for East and West sections and in summary for the whole subdivision. It will be noticed that the sums of the individual "days fished" entries for months do not agree with seasonal totals. This is because these are calculated effort figures and have been done separately for each month and season.

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MS #1030

Table 1. -- Haddock discarded at sea, Subarea 5, 1956 Haddock Year, in hundreds of pounds

	Su	bdivision <u>1</u> /	
Month	5Z, East	5Z, West	Total
February	214		214
March	60		60
April	14	- -	14
May	155	340	495
June	134	310	444
July	374	125	499
August	610	3	613
September	288	80	368
October	285	40	325
November	189	100	289
December	277	79	356
January	130	9	139
Total	2,730	1,086	3,816

 $[\]underline{1}$ / No discard was reported for Subdivision 5Y.

Table 2a.--Landings by statistical area-units, 1956 Haddock Year, Subdivision 5Y, hundreds of pounds, gutted weight

Area-unit and		G :						
market size category	Feb.	Sprin Mar	g April	Total	May	Summe June		Total
category		With .	210111	10141	iviay	o and	oury	Total
Eastern Maine ((B)							
Scrod		8	10	18	340	999	646	1,985
Large Total	7 7	1 9	10 20	18 36	234	891	486	1,611
Total	,	9	20	30	574	1,890	1,132	3,596
Central Maine (C)							
Scrod	117	728	64	909	90	219	93	402
Large	78	1,740	26	1,844	102	212	146	460
Total	195	2,468	90	2,753	192	431	239	862
Western Maine	(D)							
Serod	4,169	5,715	8,212	18,096	1,774	285	573	2,632
Large	6,977	6,764	9,223	22,964	3,139	638	981	4,758
Total	11,146	12,479	17,435	41,060	4,913	923	1,554	7,390
Fastonn Mass	/E)							
Eastern Mass. Scrod	(E) 664	6,635	1,486	8,785	576	245	688	1,509
Large	2,102	8,514	1,938	12,554	725	1,376	1,228	3,329
Total	2,766	15, 149	3,424	21,339	1,301	1,621	1,916	4,838
		•						
Inner Grounds (Scrod	F) 931	1,083	951	2 065	99	610	628	1,337
Large	1,233	976	772	2,965 2,981	100	1,600	1,836	3,536
Total	2,164	2,059	1,723	5,946	199	2,210	2,464	4,873
C								
Summaries: 5Y, NoNo.	Culf of M	o (RC)	0)					
Serod	4, 286	6, 451	8,286	19,023	2,204	1,503	1,312	5,019
Large	7,062	8,505	9,259	24,826	3,475	1,741	1,613	6,829
Total	11,348	14,956	17,545	43,849	5,679	3,244	2,925	11,848
EX 0- 0	0-16-5 37-	/T2 T2\						
5Y, SoSo. Scrod	1,595	7,718	2,437	11,750	675	855	1,316	2,846
Large	3, 335	9,490	2,710	15, 535	825	2,976	3,064	6,865
Total	4,930	17, 208	5, 147	27, 285	1,500	3,831	4,380	9,711

Table 2a.--Landings by statistical area-units, 1956 Haddock Year, Subdivision 5Y, hundreds of pounds, gutted weight (continued)

Area-unit and market size		Fall				Winte			A11
category	Aug.	Sept.	Oct.	Total	Nov.	Dec.	Jan.	Total	seasons
Eastern Maine ('R)								
Scrod	95	283	39	417			4	4	2,424
Large	287	219	61	567			1	1	2,197
Total	382	502	100	984			5	5	4,621
Central Maine (C)								
Scrod	48	181	396	625	30	64	108	202	2,138
Large	1 07	245	576	928	68	208	567	843	4,075
Total	155	426	972	1,553	98	27 2	675	1,045	6,213
Western Maine	(D)								
Scrod	652	71	155	878	271	267	722		22,866
Large	1,195	473	501	2,169	526	755	1,087		32,259
Total	1,847	544	656	3,047	797	1,022	1,809	3,628	55, 125
Eastern Mass.	(E)								
Scrod	491	592	2,627	3,710	1,156	1,520	811		17,491
Large	778	896	1,523	3, 197	454	363	252		20,149
Total	1,269	1,488	4,150	6,907	1,610	1,883	1,063	4,556	37,640
Inner Grounds (F)								
Scrod	1,479	862	2,472	4,813	348	343	319		10, 125
Large	5,185	1,512	4,263	10,960	1,214	486	796		19,973
Total	6,664	2,374	6,735	15,773	1,562	829	1,115	3,506	30, 098
Summaries:		~							
5Y, NoNo.	Gulf of Me	(BC)	D)						
Scrod	795	535	590	1,920	301	331	834	1.466	27,428
Large	1.589	937	1,138	3,664	594	963	1,655		38, 531
Total	2,384	1,472	1,728	5, 584	895	1,294	2,489		65,959
	~ 10 0 10	(= =)				•			
5Y, SoSo.			5 000	0.500	1 501	1 000	4 100	4 405	05 010
Scrod	1,970	1,454	5,099	8,523	1,504	1,863	1,130		27,616
Large Total	5,963 7,933	2,408 3,862	5,786 10,885	14,157 22,680	1,668 3,172	849 2,712	1,048 2,178		40,122 67,733
rotar	1,833	3,002	10,000	22,000	3,112	4,114	2,110	0,002	01,135

Table 2b.--Landings by statistical area-units, 1956 Haddock Year, Subdivision 5Z, hundreds of pounds, gutted weight

Area-unit and					~			
market size	~ .	Spring	A	CT 1 1		ummer	T 1	
category	Feb.	Mar.	April	Total	May	June	July	Total
Northorn Edge (τ \							
Northern Edge (6,941	4,482	2,663	14,086	5,771	14,910	22,759	43,440
Large	12, 226	6,874	2,967	22, 067	4,952	9,630	11,042	25,624
Total	19, 167	11,356	5,630	36, 153	10,723	24,540	33,801	69,064
10001	10, 10,	11,000	0,000	00, 100	10,.20	-1,010	,	,
Southeast Part (M)							
Scrod	15,742	16,944	1,119	33,805	12,259	2,932	5,915	21,106
Large	23,733	22,521	1,028	47,282	8,778	1,273	2,576	12,627
Total	39,475	39, 465	2,147	81,087	21,037	4,205	8,491	33,733
West Channel (G								
Scrod	5,485	9,265	2,953	17,703	4,800	7,586	6,823	19,209
Large	8,458	10, 419	3,927	22,804	6,854	9,743	13,308	29,905
Total	13,943	19,684	6,880	40,507	11,654	17,329	20,131	49,114
D (77)								
East Channel (H)		1 449	7 470	12,315	16 690	20,927	A 50C	49 141
Scrod	3,395	1,442	7,478		16,628	32,741	4,586 10,152	42,141 66,447
Large	5,842	1,042	6,399	13, 283 25, 598	23,554 40,182	53,668	14,738	108,588
Total	9,237	2,484	13,877	23, 330	40, 102	33,000	14, 150	100,500
Southwest Part (N)							
Serod	383	702	1,769	2,854	6,445	3,018	1,364	10,827
Large	579	499	1,420	2,498	6,651	3,621	777	11,049
Total	962	1,201	3, 189	5,352	13,096	6,639	2,141	21,876
		,	•	ĺ	·		·	
Nantucket (O)								
Scrod	375	153	101	629	1,638	2,188	1,258	5,084
Large	151	77	80	308	990	1,613	684	3,287
Total	526	230	181	937	2,628	3,801	1,942	8,371
a								
Southern N. E.			0.0	0.00	F.O.	7.0	4.5	160
Scrod	46	178	38	262	50	73	45	168
Large	35	74	460	569 831	317 367	347 420	71 116	735 903
Total	81	252	498	031	301	420	110	303
Summaries:								
5Z, EE. Ge	eorges (J	M)						
Scrod	22,683	21,426	3,782	47,891	18,030	17,842	28,674	64,546
Large	35,959	29, 395	3, 995	69, 349	13,730	10,903	13,618	38,251
Total	58,642	50,821		117,240	31,760	28,745		102,797
		ĺ		•	•			
5Z, WW. G		G, H, N, O,	Q, R, S, T					
Scrod	9,684	11,740	12,339	33,763	29,561	33,792	14,076	
Large	15,065	12,111	12,286	39,462	38,366	48,065		111,423
Total	24,749	23,851	24,625	73,225	67,927	81,857	39,068	188,852
All Areas (Table			00.044	110 100	EO 450	E9 000	45 070	140 040
Scrod	38,248	47,335		112, 427	50,470			149,840
Large	61,421	59, 501		149, 172	56,396	63,685		163, 368
Total	99,669	106,836	55, 094	261,599	100,866	117,677	88,665	313,208

Table 2b.--Landings by statistical area-units, 1956 Haddock Year, Subdivision 5Z, hundreds of pounds, gutted weight (continued)

market size category	Aug.	Fall Sept.	Oct.	Total	Nov.	Winter Dec.	Jan.	Total	All seasons
Northern Edge	(T)								
Scrod	28,795	15,147	27,627	71,569	9,185	3,016	3,129	15 330	144,425
Large	12,468	5,800	7,814	26,082	4,256	2,839	5,385	12,480	86, 253
Total	41,263	20,947	35, 441	97,651	13, 441	5,855	8,514		230,678
Southeast Part	(M)								
Scrod	3,588	986	555	5,129	2,587	6,275	2,251	11,113	71,153
Large	855	650	83	1,588	1,107	2,767	1,536	5,410	66,907
Total	4,443	1,636	638	6,717	3,694	9,042	3,787	16,523	138,060
West Channel (C				00.101				22	
Scrod	24,090	49, 398	16,646	90, 134	10,621	8,755	6,731		153, 153
Large	15,288	13,786	10, 378	39, 452	9,592	8,599	7,937		118,289
Total	39,378	63,184	27,024	129, 586	20,213	17,354	14,668	52,235	271,442
East Channel (H									
Scrod	5,272	12,748	8,576	26,596	6,502	9,682	5,650		102,886
Large	6,082	5,713	8,060	19,855	16,105	20,938	13,092		149,720
Total	11,354	18,461	16,636	46, 451	22,607	30,620	18,742	71,969	252,606
Southwest Part									
Scrod	491		588	1,079	526	425	708	1,659	16,419
Large	357		69	426	231	492	1,149	1,872	15,845
Total	848		657	1,505	757	917	1,857	3,531	32,264
Nantucket (O)	1 150	1 710	1 400	4 0.07	4 000	410	20	1 779	11 000
Scrod	1,158	1,710 218	1,469 235	4,337 635	1,328	412	32	1,772	11,822
Large Total	182 1,340	1, 928	1,704	4,972	466 1,794	216 628	12 44	694	4,924 16,746
Couthour N E				ŕ				·	·
Southern N. E. Scrod	(Q, R, S, T	28	207	291	136	230		366	1,087
Large	441	39	163	643	123	94		217	2,164
Total	497	67	370	934	259	324		583	3, 251
Summaries: 5Z, EE. G	eorges (J	M)							
Scrod	32,383	16, 133	28, 182	76,698	11,772	9,291	5,380	26.443	215,578
Large	13,323	6,450	7,897	27,670	5, 363	5,606	6,921		153, 160
Total	45,706	22,583		104, 368	17,135	14,897	12,301		368,738
5Z, WW. (Georges (C	G.H.N.O.	Q. R. S. T)					
Scrod	31,067	63,884		122,437	19,113	19,504	13,121	51,738	285, 367
Large	22,350	19,756	18,905	61,011	26,517	30, 339	22,190	-	290,942
Total	53,417	83,640	46, 391	183, 448	45,630	49,843	35,311	130,784	576,309
All Areas (Table	es 2a, 2b)								
Scrod	66,215	82,006	61,357	209,578	32,690	30,989	20,465	84,144	555,989
Large	43,225	29,551	33,726	106,502	34,142	37,757		103,713	
Total	109,440	111,557	95,083	316,080	66,832	68,746	52,279	187,857	1.078,744

Table 3. --Length composition of haddock discarded at sea, 5Z East and West, 1956 Haddock Year, in hundreds of fish

Length (cm)	5Z East	5Z West	5Z Total
16	1		1
17	1		1
18	1		ī
19	-		_
20	1		1
21	2		2
22	2 2 3 7	2	4
23	3	2	5
24	7	5	12
25	10	11	21
26	21	18	39
27	33	42	75
28	63	79	142
29	88	96	184
30	151	116	267
31	181	118	299
32	237	120	357
33	282	89	371
34	308	75	383
35	316	76	392
36	309	71	380
37	305	61	366
38	237	77	314
39	165	95 4 7	260 166
40	119 59	21	80
41 42	27	15	42
	14	4	18
43 44	6	3	9
45	4	1	5
46	4	-	4
47	3	2	5
48		2	-
49	1		1
Total	2,961	1,246	4207

Table 4.--Summary of samples of landed haddock, 1956 Haddock Year

Season	5Y No Lengths			South		East Scales	5Z V Lengths	
Spring	3,187	676	582	319	1,816	310	2,205	300
Summer	2,510	594	552	122	3,346	352	7,307	8 5 9
Fall	4,692	625	767	364	2,880	430	5,964	454
Winter	1,122	138	764	155	1,721	140	6,179	841
Total	11,511	2,033	2,66	5 960	9,763	1,232	21,655	2,454

Table 5.--Length composition of scrod and large haddock landed from 5Z East and West, February 1956, in hundreds of fish

Length		East			5Z West			5Z Total	
(cm.)	Scrod	Large	Total	Scrod	Large	Total	Scrod	Large	Total
33 4 5 6 7 8 9 40 1 2 3 4 5 6 7 8 9 50 1 2 3 4 5 6 7 8 9 60 1 2 3 4 5 6 7 8 9 6 7 8 9 6 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 7 8	23 23 115 161 139 208 392 576 530 739 900 992 992 1,085 946 876 577 646 208 92 92 23	13 12 23 13 51 190 241 571 698 608 672 584 748 481 646 545 418 317 304 304 291 190 228 139 101 38 177 127 51 38 76	23 23 115 161 152 208 392 576 530 739 912 1,015 1,136 1,136 1,117 1,148 1,344 816 764 676 771 481 646 545 418 317 304 304 291 190 228 139 101 38 177 127 51 38 76	16 16 31 109 141 233 188 141 235 235 327 375 517 500 422 391 375 250 78 62 62	16 62 156 140 187 367 312 289 210 257 140 234 179 172 125 125 78 156 78 101 39 86 70 23 8 23 16 8	16 16 31 109 141 233 188 141 235 235 327 375 533 562 578 531 562 617 390 351 351 210 257 140 234 179 172 125 125 78 156 78 101 39 86 70 70 70 70 70 70 70 70 70 70	16 39 54 224 302 372 396 533 811 765 1,066 1,275 1,509 1,492 1,507 1,337 1,251 827 724 270 154 92 23	13 12 39 75 207 330 428 938 1,010 897 961 794 1,005 621 880 724 590 442 429 382 447 268 329 178 187 108 200 135 74 54 84	164 16 39 54 224 302 385 396 533 811 765 1,066 1,287 1,548 1,567 1,765 1,765 1,767 1,667 1,765 1,765 1,765 1,765 1,765 1,765 1,765 1,765 1,765 1,765 1,765 1,765 1,765 1,767 1,667 1,765 1,765 1,765 1,765 1,765 1,765 1,765 1,765 1,765 1,765 1,765 1,765 1,765 1,765 1,767 1,667 1,765 1,
Total	10, 335	8,895	19,230	4,704	3,946	8,650	15,039	12,841	27,880

Table 6.--Length composition of scrod and large haddock landed from 5Z East and West, March 1956, in hundreds of fish

Length		Z East			5Z West	m - 4 - 1	Scrod	5Z Total Large	Total
(cm.)	Scrod	Large	Total	Scrod	Large	Total	Scrod	Large	Total
37 8 9 40 1 2 3 4 5 6 7 8 9 50 1 2 3 4 5 6 7 8 9 60 1 2 3 4 5 6 7 8 9 70 1 2 3 4 5 6 7 8	116 174 116 463 636 926 984 1,157 1,099 1,041 868 463 405 231 58 116	104 104 228 290 560 436 581 705 622 747 498 415 519 249 455 250 311 145 187 83 83 41 21 41 62 	116 174 116 463 636 926 984 1,261 1,203 1,269 1,158 1,023 841 986 936 680 863 498 415 519 249 455 250 311 145 187 83 83 41 21 41 62 	55 28 166 84 139 139 55 83 194 333 332 194 166 249 193 222 194 85 28	11 11 33 45 123 223 157 179 256 156 255 255 178 158 134 167 78 45 11 45 22 11	55 28 166 84 139 139 55 83 194 333 316 344 476 333 377 317 389 323 428 449 377 449 340 206 158 134 167 78 134 67 78 134 167 78 134 167 178 178 178 178 178 178 178 178 178 17	55 28 166 200 313 255 518 719 1,120 1,317 1,462 1,432 1,484 1,201 795 599 571 397 307 309 222 194 85 28	115 115 261 290 605 559 804 862 801 1,003 653 670 774 427 613 384 478 223 321 150 161 86 32 86 84 11 11 41	55 28 166 200 313 255 518 719 1,120 1,317 1,577 1,547 1,491 1,400 1,158 1,375 1,259 1,108 1,312 875 864 859 455 613 384 478 223 321 150 161 86 32 86 84 11 11 41
Total	9,258	7,778	17,036	4,519	2,853	7,372	13,777	10,631	24,408

Table 7.--Length composition of scrod and large haddock landed $^{\rm f}{\rm rom}~5{\rm Z}$ East and West, April 1956, in hundreds of fish

Length		Z East			Z West			Total	
(cm.)	Scrod	Large	Total	Scrod	Large	Total	Scrod	Large	Total
36				20		20	20		20
7				20		20	20		20
8				41		41	41		41
9	74		74	61		61	135		135
40	49		49	346		346	395		395
1	49		49	407		407	456		456
2	173		173	346		346	519		519
3	149		149	366		366	515		515
4	198		198	163		163	361		361
5	148		148	183		183	331		331
6	74		74	488	0	488	562	0	562 499
7	246 124		$\frac{246}{124}$	244 569	9 23	253 592	490 693	9 23	716
8 9	124	79	203	529	50	579	653	129	782
50	245	20	265	529	92	621	774	112	886
1	74	79	153	366	142	508	440	221	661
2	49		49	285	239	524	334	239	573
3		99	99	102	294	396	102	393	495
4	74	119	193	163	326	489	237	445	682
5		78	78	102	295	397	102	373	475
6		59	59	122	294	416	122	353	475
7		79	79	41	183	224	41	262	303
8		177	177	61 20	$\begin{array}{c} 152 \\ 169 \end{array}$	213 189	61 20	329 268	390 288
9 60		99 2 0	99 20	20	88	108	20	108	128
1		79	79	20	92	112	20	171	191
2		40	40	20	133	153	20	173	193
3					87	87		87	87
4		40	40		106	106		146	146
5 6			,		87	87		87	87
6					78	78		78	78
7		20	20		41	41		61	61
8					55	55		55	55
9					46	46		46 32	46 32
70					32 29	32 29		32 29	29
1					55	55		55	55
2 3					14	14		14	14
4		20	20		1	1		21	21
5		20	20		5	5		5	5
6					9	9		9	9
Total	1,850	1,107	2,957	5,634	3,226	8,860	7,484	4,333	11,817

Table 8.--Length composition of scrod and large haddock landed from 5Z East and West, May 1956, in hundreds of fish

		7 D			7 1111			= 7	
Length (cm.)	Scrod	Z East Large	Total	Scrod	Z West Large	Total	Scrod	Z Total Large	Total
33 4 5 6 7 8 9 40 1 2 3 4 5 6 7 8 9 60 1 2 3 4 5 6 7 8 9 7 0 1 2 3 4 5 6 7 8 9 7 0 1 2 3 4 5 6 7 8 9 7 0 1 2 3 4 5 6 7 8 9 7 0 1 2 3 4 5 6 7 8 9 7 0 1 2 3 4 5 6 7 8 9 7 0 1 2 3 4 5 6 7 8 9 7 0 1 2 3 4 5 6 7 8 9 7 0 1 2 3 4 Total	113 57 142 397 454 539 709 680 680 1,048 793 821 737 878 737 312 340 142	21 21 21 81 83 188 301 311 394 437 415 301 394 114 156 114 52 106 21 21 21 31 10	113 57 142 397 454 539 709 680 680 1,069 814 842 818 961 925 613 651 536 437 415 301 394 197 208 124 114 52 106 21 21 31 10	21 21 149 256 383 682 852 1,001 1,299 980 1,108 1,001 639 980 1,172 1,172 1,193 1,150 1,001 490 320 106 64 43	6 11 6 46 80 205 279 570 855 741 912 895 775 730 673 644 388 359 308 296 285 251 205 217 171 108 125 91 80 23 17 23 11 17 	21 21 149 256 383 682 852 1,001 1,305 991 1,144 1,007 656 986 1,218 1,252 1,398 1,429 1,571 1,061 1,018 959 818 730 673 644 388 359 308 296 285 251 205 217 171 108 125 217 171 108 125 217 171 108 125 217 171 108 125 217 171 108 125 217 171 108 117 108 108 108 108 108 108 108 108 108 108	21 21 149 369 440 824 1,249 1,455 1,838 1,689 1,788 1,687 1,993 1,909 2,071 1,887 1,313 830 462 106 64 43	6 111 6 6 38 27 67 161 288 467 871 1,166 1,135 1,349 1,310 1,076 1,124 870 852 512 473 464 410 337 357 226 238 202 118 135 17 23 11 17 	21 21 149 369 440 824 1,249 1,455 1,844 1,700 1,794 1,687 1,725 1,800 2,060 2,070 2,359 2,354 2,184 1,996 1,597 1,455 1,374 1,119 1,124 870 852 512 473 464 410 337 357 226 238 202 118 135 91 80 23 17 23 11 17 -
		-, 100							,

Table 9.--Length composition of scrod and large haddock landed from 5Z East and West, June 1956, in hundreds of fish

T		7 D :					_		
Length (cm.)	Scrod	Z East Large	Total	Scrod	5Z West Large	Total	Scrod	Z Total Large	Total
35 6 7 8 9 40 1 2 3 4 5 6 7 8 9 50 1 2 3 4 5 6 7 8 9 60 1 2 3 4 5 6 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 8 9	44 22 311 222 467 956 1,002 600 578 1,046 578 823 778 400 511 200 67 67 44 22	27 27 93 173 253 479 559 624 491 439 173 187 106 80 40 27 67 	44 22 311 222 467 956 1,002 600 578 1,046 578 895 805 916 951 653 990 759 691 558 483 173 209 106 80 40 27 67 27	60 199 318 458 876 1,055 1,333 1,453 1,453 1,494 1,413 1,433 1,174 1,414 1,532 975 577 358 80 60 20	33 33 33 33 142 175 510 794 894 1,338 1,162 1,346 1,145 902 677 685 535 460 443 468 309 267 276 284 301 192 142 42 109 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	60 199 318 458 876 1,055 1,333 1,334 1,453 1,591 1,327 1,446 1,316 1,589 2,042 1,769 1,471 1,696 1,242 1,406 1,145 902 697 685 535 460 443 468 309 267 276 284 301 192 142 109 8 8 8 8 8 8	104 221 629 680 1,343 2,011 2,335 1,934 2,031 2,637 1,872 2,281 2,211 1,997 2,192 1,932 1,486 777 425 147 104 22 20	33 60 60 235 348 763 1,273 1,453 1,653 1,785 1,318 1,089 783 765 575 487 510 468 309 267 276 311 301 192 142 42 109 8 17 17	104 221 629 680 1,343 2,011 2,335 1,934 2,031 2,637 1,905 2,341 2,271 2,232 2,540 2,695 2,759 2,230 2,387 1,800 1,889 1,318 1,111 803 765 575 487 510 468 309 267 276 311 301 192 142 42 109 8 8 8 8 8 8 8

Total 10, 384 3,872 14,256 19,007 13,779 32,786 29,391 17,651 47,042

Table 10.--Length composition of scrod and large haddock landed from 5Z East and West, July 1956, in hundreds of fish .

Length		5Z East			5Z West			5Z Total		
(cm.)	Scrod	Large	Total	Scrod	Large	Total	Scrod	Large	Total	
32 34 56 7 8 9 40 1 2 3 4 5 6 7 8 9 50 1 2 3 4 5 6 7 8 9 6 7 8 9 6 7 8 9 9 1 1 2 3 4 4 5 6 6 7 8 9 9 9 1 1 1 2 3 4 4 5 6 7 8 9 9 9 1 1 1 2 3 4 4 5 6 7 8 9 9 9 1 1 1 2 3 4 4 5 6 7 8 9 9 9 9 9 9 9 9 9 9 9 9 9	16 16 78 157 314 471 769 911 1,053 1,241 1,083 1,367 1,398 1,664 1,397 1,225 1,020 628 345 63 31 47 16	6 17 34 34 141 248 389 495 534 511 349 355 417 203 191 79 91 72 84 34 34 37 6 6 17 6 6 11 6	16 16 78 157 314 471 769 911 1,053 1,241 1,083 1,340 1,367 1,415 1,698 1,431 1,366 1,268 1,017 840 597 542 396 371 417 203 191 79 91 72 84 34 34 17 65 65 17 66 17 66 17 66 17 66 17 66 17 66 66 17 66 67 67 67 67 67 67 67 67 67 67 67 67	21 11 21 106 191 340 424 498 340 393 360 328 243 371 413 563 456 426 479 278 223 149 106 85 21 11	5 9 37 46 55 123 206 247 389 458 536 508 535 508 499 366 352 307 275 174 179 174 137 128 115 101 69 55 46 32 54 9 9 4 9	21 11 11 21 106 191 340 424 498 340 393 365 337 280 417 468 686 662 673 868 736 759 657 641 593 520 377 352 318 286 174 137 128 115 101 69 55 46 99 44 99 99 44 99 99 44 99 99 99 99 99	16 37 89 168 335 577 960 1,251 1,477 1,727 1,727 1,727 1,726 1,907 1,768 1,638 1,583 1,084 771 542 309 270 165 106 85 21 11 11	6 5 26 71 80 196 371 595 742 923 969 885 863 952 711 690 445 443 379 359 208 213 191 143 179 137 107 86 61 57 38 59 44 99 99 99 99 90 90 90 90 90 90 90 90 90	16 37 89 168 335 577 960 1,251 1,477 1,739 1,423 1,732 1,752 1,978 1,848 1,834 1,954 1,679 1,513 1,465 1,278 1,155 1,028 1,058 796 711 456 443 390 370 208 213 191 143 179 137 107 86 61 57 38 54 99 94 4	
Total	16,644	4,460	21,104	6,890	6,706	13,596	23,534	11,166	34,700	

Table 11.--Length composition of scrod and large haddock landed from 5Z East and West, August 1956, in hundreds of fish

Length		Z East			Z West			5Z Total	
(cm.)	Scrod	Large	Total	Scrod	Large	Total	Scrod	Large	Total
33 4 5 6 7 8 9 40 1 2 3 4 5 6 7 8 9 5 0 1 2 3 4 5 6 7 8 9 7 0 1 2 3 4 5 6 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 7 8	29 58 88 204 467 672 1,372 1,518 1,753 1,606 1,928 1,402 1,285 1,578 1,139 1,256 1,110 409 321 234 29 29	4 18 36 151 258 329 431 495 570 415 463 271 182 200 173 58 71 58 36 27 9 4 13 4 	29 58 88 204 467 672 1,372 1,518 1,753 1,606 1,928 1,402 1,289 1,596 1,175 1,407 1,368 738 752 729 570 444 492 271 182 200 173 58 71 58 36 27 9 4 13 4 9 4	22 180 270 653 766 1,059 946 1,464 1,126 946 1,464 946 811 698 518 293 225 68 	10 15 18 40 74 64 60 98 128 283 218 302 408 529 558 628 529 461 273 344 268 154 124 130 115 69 99 91 51 55 55 55 56 76 76 76 76 76 76 76 76 76 76 76 76 76	22 180 270 663 781 1,077 986 1,538 1,754 1,704 1,1074 1,113 1,106 1,047 851 853 667 431 461 273 366 268 154 130 115 69 89 94 51 55 10 55 55 55	29 58 88 226 647 942 2,025 2,284 2,812 2,552 3,392 2,929 2,704 2,085 2,720 2,056 1,220 1,019 752 293 254 97 222	10 15 18 40 74 64 64 116 164 434 476 631 839 1,024 1,128 1,062 702 643 473 517 326 225 182 166 142 78 93 107 55 51 14 91 91 91 91 91 91 91 91 91 91 91 91 91	29 58 88 226 647 942 2,035 2,299 2,830 2,592 3,466 3,156 2,993 2,820 2,249 3,154 2,532 1,851 1,297 1,159 702 643 473 539 326 225 166 142 78 93 107 555 51 1 90 5
Total	18,487	4,293	22,780	15,811	6,726	22,537	34,298	11,019	45, 317

Table 12.--Length composition of scrod and large haddock landed from 5Z East and West, September 1956, in hundreds of fish

		-							
Length		Z East	Total	Scrod	Z West	Total	Scrod	Z Total	Total
(cm .)	Scrod	Large	Total	Seroa	Large	Total	Scrod	Large	
34				51		51	51		51
5	31		31				31		31
6	63		63	204	12	216	267	12	279
7	157		157	204		204	361		361
8	376		376	867		867	1,243		1,243
9	595		595	1,428 2,804		1,428	2,023		2,023 3,524
40 1	720 814		720 814	2,856	23	2,804 2,879	3,524 3,670	23	3, 693
2	1,127		1,127	3, 568	12	3,580	4,695	12	4,707
3	1,064	6	1,070	4,436	35	4,471	5,500	41	5,541
4	783	6	789	4,538	12	4,550	5,321	18	5,339
5	564		564	3,569		3,569	4,133		4,133
6	407	11	418	3,467	23	3,490	3,874	34	3,908
7	626	17	643	2,958	103	3,061	3,584	120	3,704
8	532	28	560	2,142	104	2,246	2,674	132	2,806
9 50	$\frac{282}{250}$	50 83	332 333	765 561	$\frac{173}{347}$	938 908	1,047 811	223 430	1,270 1,241
1	344	206	550	255	265	520	599	471	1,070
2	94	128	222	102	392	494	196	520	716
3		188	188	51	451	502	51	639	690
4	31	161	192	102	451	553	133	612	745
5		161	161	51	438	489	51	599	650
6	31	117	148		415	415	31	532	563
7		128	128		231	231		359	359
8		78 78	78		288 219	288 219		$\frac{366}{297}$	366 297
9 60		33	78 33		254	254		287	287
1		28	28		288	288		316	316
2		78	78		150	150		228	228
3		28	28		138	138		166	166
4		44	44		81	81		125	125
5		33	33		104	104		137	1 37
6		33	33		92	92		125	125
7		22	22		69	69		91	91
8		- - 6	- - 6		46	46		46	$\begin{array}{c} 46 \\ 52 \end{array}$
9 70		11	11		46 81	46 81		52 92	92
1		17	17		12	12		29	29
2		6	6					6	6
3		6	6		11	11		17	17
4									
5									
6		6	6			1.0		6	6
7					12	12		12	12
8 9					12	12		 12	12
9					14	12		12	12
Total	8,891	1 707	10,688	34,979	5 200	40,369	12 970	7,187	51,057
Total	0,031	1,797	10,000	JT, JIJ	5,390	40, 308	10,010	1,101	01,001

Table 13.--Length composition of scrod and large haddock landed from 5Z East and West, October 1956, in hundreds of fish

		·							
Length	5	Z East			5Z West		5.	Z Total	
(cm.)	Scrod	Large	Total	Scrod	Large	Total	Scrod	Large	Total
34 56 7 8 9 40 1 2 3 4 5 6 7 8 9 6 0 1 2 3 4 5 6 7 8 9 6 7 8 9 7 1 2 3 4 5 6 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 7 8	28 138 248 386 552 1,103 1,462 1,849 1,545 1,765 1,626 1,324 1,296 1,021 690 386 331 138 110 56 28	6 6 13 32 45 76 153 204 299 312 197 312 280 140 146 83 57 32 45 13 6 13 6	28 138 248 386 552 1,103 1,462 1,855 1,545 1,771 1,626 1,337 1,328 1,066 539 535 437 422 253 340 280 140 146 83 57 32 45 13 6 13 6 6	64 129 97 322 579 870 1,401 1,546 1,723 1,514 1,079 580 451 451 145 129 16 97	3 -3 14 16 67 70 163 255 285 415 387 381 472 328 377 307 285 206 176 128 144 90 95 84 49 49 16 36 41 11 11 11 3 3 3	64 129 97 322 582 870 1,401 1,546 1,723 1,528 1,095 1,098 779 743 706 560 516 510 488 425 377 307 285 206 176 128 144 90 95 84 49 49 116 36 41 111 11 3 3	28 202 377 483 874 1,682 2,332 3,250 2,962 3,311 3,349 2,838 2,375 2,052 1,399 966 782 589 255 185 157 16 97	3 6 3 6 3 6 27 48 112 146 316 459 584 727 584 693 752 468 523 390 342 238 221 141 150 103 95 84 67 555 551 16 36 41 11 11 33 41 41 41 41 41 41 41 41 41 41 41 41 41	28 202 377 483 874 1,685 2,332 3,256 2,965 3,317 3,349 2,865 2,423 2,164 1,545 1,282 1,241 1,173 982 769 850 768 565 523 390 342 238 221 141 150 103 95 84 67 55 55 16 36 41 11 11 3 3 3
Total	16,082	2,495	18,577	14,479	5,027	19,506	30,561	7,522	38,083

Table 14.--Length composition of scrod and large haddock landed from 5Z East and West, November 1956, in hundreds of fish

		7 7			F. 67 XXI			7 0 -4 -1	
Length	Scrod	Z East	Total		5Z West			Z Total	
(cm.) 33 4 5 6 7 8 9 40 1 2 3 4 5 6 7 8 9 50 1 2 3 4 5 6 7 8 9 70 1 2 3 4 5 6 7 8 9 70 1 2 3 4 5 6 7 8 9 70 1 2 3 4 5 6 7 8 9 70 1 2 3 4 5 6 7 8 9 7 7 8 9 7 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 8 8 9 7 8 9 8 8 9 7 8 9 8 8 9 7 8 9 8 8 9 7 8 9 8 8 9 7 8 9 8 8 9 8 8 9 7 8 9 8 8 9 8 8 9 8 8 9 8 8 9 8 8 9 8 8 9 8 8 9 8 8 9 8 8 9 8 8 9 8 8 9 8 8 9 8 8 9 8 9 8 8 8 8 9 8 8 8 8 9 8 8 8 8 9 8 8 8 8 9 8	26 26 52 183 235 287 496 756 678 835 836 548 443 339 156 183 52 78 26 26	19 19 19 19 19 18 155 271 214 136 136 78 58 58 39 78 39 19 19 19 19 19	Total 26 26 52 183 235 287 496 756 678 835 836 567 462 358 358 234 338 323 292 162 162 78 58 58 39 78 39 19	83 83 217 333 517 700 983 833 1,133 1,084 1,118 750 767 317 333 283 133 50 50 83	Large 4	Total 83 83 217 333 521 700 983 833 1,133 1,088 1,123 762 803 395 590 591 465 485 523 523 589 552 448 369 340 319 199 207 174 149 141 75 116 58 58 46 37 62 25 17 12 8 12 4	26 26 135 266 452 620 1,013 1,456 1,668 1,969 1,632 1,561 1,089 1,106 473 516 335 211 76 83	Large 4 23 24 31 60 156 412 579 546 571 609 601 564 610 487 447 379 377 238 207 174 149 160 75 116 58 77 46 37 62 25 17 12 8 12 4 19	Total 26 26 135 266 452 620 1,017 1,456 1,661 1,668 1,969 1,655 1,120 1,166 629 928 914 757 647 685 601 647 610 487 447 379 377 238 207 174 149 160 75 116 58 77 46 37 62 25 17 12 8 12 4 19 24,426
Total	0,000	1,010	0,110	0,000	0, 100	10, 200	10, 100	1,010	31, 130

Table 15.--Length composition of scrod and large haddock landed from 5Z East and West, December 1956, in hundreds of fish

Length		Z East	Total	Sanad	Z West			Z Total	Total
35 67 8 9 40 1 2 3 4 5 6 7 8 9 50 1 2 3 4 5 6 7 8 9 6 0 1 2 3 4 5 6 7 8 9 6 0 1 2 3 4 5 6 7 8 9 8 9 8 9 8 9 8 9 8 9 8 9 8 9 8 9 8	21 136 126 356 576 723 922 650 660 335 429 262 293 105 42 21	36 36 73 73 36 73 183 147 110 36 36 182 73 110 110 73 36	Total 21 136 126 356 576 723 922 650 696 335 465 262 366 178 78 125 193 168 110 36 36 182 73 110 110 .733 36	24 24 108 84 276 324 767 839 1,055 1,007 1,198 1,055 719 636 456 408 324 252 84 60 12 24 12 12	77 155 8 1548 61 156 276 385 522 504 659 675 640 586 516 498 334 246 271 254 175 152 102 105 80 80 44 40 29 33 25 11 4 4 4 4 4	Total 24 24 108 84 276 324 767 839 1,062 1,022 1,206 1,070 767 697 612 684 709 774 588 719 687 664 598 528 498 334 246 271 254 175 152 102 105 80 80 44 40 29 33 25 11 4 4 4 4 4 4	Scrod 45 160 234 440 852 1,047 1,689 1,489 1,715 1,342 1,627 1,317 1,012 741 498 460 334 273 84 60 12 24 12 12	Large 43 15 44 15 121 134 192 349 568 669 614 695 785 676 622 516 680 407 356 381 327 211 152 102 105 80 80 44 40 29 33 25 11 4 4 4 4 4	Total 45 160 234 440 852 1,047 1,689 1,489 1,758 1,357 1,671 1,332 1,133 875 690 809 902 942 698 755 797 700 634 528 680 407 356 381 327 211 152 102 105 80 80 44 40 29 33 25 11 4 4 4 4 4 4
Total	5,719	1,569	7,288	9,760	7,572	17, 332	15,479	9,141	24,620

Table 16.--Length composition of scrod and large haddock landed from 5Z East and West, January 1957, in hundreds of fish

Length	5	Z East			5Z West		5.	Z Total	
(cm.)	Scrod	Large	Total	Scrod	Large'	Total	Scrod	Large	Total
35 6 7 8 9 40 1 2 3 4 5 6 7 8 9 50 1 2 3 4 5 6 7 8 9 60 1 2 3 4 5 6 7 8 9 6 7 8 9 7 8 9 8 9 7 8 9 7 8 9 8 9 8 9 7 8 9 8 9	7 20 53 72 131 223 327 217 243 301 289 269 223 158 158 105 39 20 20 7	5 5 21 36 94 83 172 166 152 198 88 100 100 83 78 36 31 62 42 26 26 21 31 10 10 10 10 5 5	7 20 53 72 131 223 327 217 243 301 294 274 244 194 252 188 211 186 172 159 198 88 100 100 83 78 36 26 26 21 31 10 10 10 55 55	26 13 37 26 65 218 310 513 603 617 666 654 423 448 282 295 141 90 50 128 51 26 13 13	8 25 33 75 174 291 388 507 307 523 382 489 399 265 233 199 234 216 108 124 50 109 42 33 43 42 8 26 8 8 8	26 13 37 26 65 218 310 513 603 617 666 662 448 481 357 469 432 478 557 435 574 408 540 425 278 233 212 234 216 108 124 50 109 42 33 43 43 43 43 43 43 43 43 43 43 43 44 44	33 33 90 98 196 441 637 730 846 918 955 885 877 581 606 387 334 161 110 57 128 51 26 51 26 13	5 5 29 61 127 158 346 457 540 659 505 611 482 589 482 343 269 296 258 134 150 71 140 52 43 53 47 13 65 55 65 65 65 65 65 65 65 65 65 65 65	33 33 90 98 196 441 637 730 846 918 960 890 906 642 733 545 680 618 650 716 633 662 508 640 508 356 269 243 296 243 296 243 296 243 296 356 357 140 552 43 53 545 53 650 71 660 71 71 71 71 71 71 71 71 71 71
Total	2,882	1,868	4,750	6, 401	5,366	11,767	9,283	7,234	16,517

Table 17. --Length composition of scrod and large haddock landed from 5Z East and West, $1956\,\mathrm{Haddock}$ Year, in hundreds of fish

Cem	Length	5Z East			5Z West			5Z Total		
3 71 71 58 58 129 129 4 164 83 83 247 247 5 535 1,195 1,002 12 1,014 2,197 12 2,209 7 2,326 2,326 1,700 1,700 4,026 4,026 8 3,557 3,557 3,327 3,327 6,884 6,884 40 7,978 7,978 8,597 19 8,616 16,575 19 16,594 1 9,818 6 9,824 10,910 47 10,957 20,728 53 20,781 2 9,9080 9,080 11,640 66 11,706 20,722 66 20,786 3 10,229 54 10,933 13,547 122 13,669 23,776 176 23,952 4 9,949 6 9,955 14,233 102 </td <td></td> <td>Scrod</td> <td>Large</td> <td>Total</td> <td>Scrod</td> <td>Large</td> <td>Total</td> <td>Scrod</td> <td>Large</td> <td>Total</td>		Scrod	Large	Total	Scrod	Large	Total	Scrod	Large	Total
8 41 41 42 42 83 83 9 47 47 47 47 80 23 23 23 23 1 8 8 8 8 2 19 19 6 6 25 25 3 4 6 6 6 6 5 6 6 6 6 6 5 6 4 4 4 4	3 4 5 6 7 8 9 4 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5	71 164 535 1,195 2,326 3,557 6,052 7,978 9,818 9,080 10,229 9,949 9,437 9,630 9,032 8,173 6,921 5,084 3,186 2,260 955 632 239 170	6 54 6 127 190 410 853 1,670 2,308 4,047 4,000 4,170 3,985 3,783 3,155 2,492 2,232 2,232 2,181 1,255 1,412 1,230 968 724 568 420 410 236 97 294 226 73 55 110 51 110 51 110 51 51 51 51 51 51 51 51 51 51 51 51 51	71 164 535 1,195 2,326 3,557 6,978 9,824 9,080 10,283 9,955 4,929 9,564 9,820 9,442 9,026 8,391 7,233 6,260 5,125 4,617 4,022 2,181 1,255 1,412 1,230 410 236 97 294 226 73 55 110 51 41	83 350 1,002 1,700 3,327 5,862 8,597 10,910 11,640 13,547 14,233 12,435 11,083 10,224 8,045 7,221 5,656 3,394 1,983 1,983 1,416 899 719 386 359 164 61 31	13 19 47 66 122 102 145 249 573 1,051 1,547 2,786 3,990 5,293 6,481 6,447 6,105 5,207 4,811 4,412 3,380 2,917 2,489 2,377 1,964 1,668 1,496 1,234 1,668 1,496 1,234 1,224 854 673 429 472 223 134 80 81 77 42 47 23 86 66 67 87 87 87 87 87 87 87 87 87 8	83 350 1,014 1,700 3,327 5,875 8,616 10,957 11,706 13,669 14,335 12,833 12,684 11,275 9,592 10,007 9,646 8,049 7,346 6,824 5,593 5,170 4,576 3,441 2,948 673 429 472 223 134 80 81 77 42 47 23 86 66 66 66 66 77 87 87 87 87 87 87 87 87 87	129 247 885 2,197 4,026 6,884 11,914 16,575 20,728 20,776 24,182 22,125 22,065 20,115 18,397 14,966 12,305 8,842 5,654 2,938 2,048 1,138 889 408 359 164 61 31	26 19 53 66 176 108 272 439 983 1,904 3,217 5,094 8,037 9,293 10,466 10,260 7,699 7,699 7,699 7,699 3,345 2,236 1,916 1,460 9,260 1,951 967 5545 244 85 92 77 83 85 85 85 85 85 85 85 85 85 85 85 85 85	129 247 885 2,209 4,026 6,884 11,940 16,594 20,781 20,786 23,952 24,290 22,397 22,504 21,098 20,301 18,183 17,399 16,879 14,947 13,174 11,368 10,149 8,107 7,402 6,757 4,696 4,360 3,763 3,345 2,688 2,236 1,916 1,644 1,460 951 967 655 545 278 244 85 92 77 83 47 23 85 92 77 83 47 23 85 92 77 83 47 23 85 92 77 83 47 23 85 92 77

Total 116,711 43,836 160,547 148,117 77,452 225,569 264,828 121,288 386,116

Table 18.--Length composition of scrod and large haddock landed from 5Y North and South, Spring 1956, in hundreds of fish

Length		5Y North	1		5Y South			5Y Total	1
(cm.)	Scrod	Large	Total	Scrod	Large	Total	Scrod	Large	Total
31 2 34 5 6 7 8 9 40 1 2 3 4 5 6 7 8 9 6 7 8 9 6 7 8 9 6 7 8 9 6 7 8 9 6 7 8 9 6 7 8 9 6 7 8 9 7 8 9 8 9 8 9 8 9 8 9 8 9 8 9 8 9	7 14 7 21 63 140 168 286 370 454 678 734 1,083 1,138 1,222 1,104 790 405 426 147 105 56 7	8 4 8 27 65 107 198 302 469 538 580 504 435 405 351 328 256 244 149 114 88 84 53 65 57 19 23 15 4 4 4 4 4 4 4 4 5 6 6 6 6 7 1 1 1 1 1 1 1 1 1 1 1 1 1	714 -7 -1 63 140 168 286 370 462 682 742 1,110 1,203 1,302 1,092 874 964 727 609 525 596 431 435 405 358 328 256 244 149 114 88 84 53 65 57 19 23 15 4 4	42 42 105 296 275 359 211 614 232 549 422 507 465 465 444 486 422 338 275 42 42 21	16 32 129 322 322 242 322 403 355 338 355 258 274 145 145 226 80 113 64 64 48 16 32	42 42 105 296 275 359 211 614 232 549 422 507 465 460 518 551 660 597 284 364 424 355 338 355 258 274 145 226 80 113 64 64 48 16 32	7 42 56 112 317 338 499 379 900 602 1,003 1,100 1,241 1,548 1,666 1,590 1,212 743 701 189 147 77 7	8 4 8 27 65 123 230 431 791 860 822 826 872 951 762 790 663 625 473 401 470 229 227 152 148 101 81 89 19 23 15 15 4 4	7 42 56 112 317 338 499 379 900 602 1,011 1,104 1,249 1,575 1,668 1,789 1,820 1,643 1,561 1,011 973 949 951 769 790 663 632 473 401 470 229 227 152 148 101 81 89 19 23 15 15 4 4
Total	9,432	7,012	16,444	6,654	4, 301	10,955	16,086	11, 313	27,399

Table 19.--Length composition of scrod and large haddock landed from 5Y North and South, Summer 1956, in hundreds of fish

Length	5	Y North		5	Y South		5	Y Total	
(cm.)	Scrod	Large	Total	Scrod	Large	Total	Scrod	Large	Total
35 67 89 40 12 34 56 78 90 12 34 56 78 90 12 34 56 78 90 12 34 56 78 90 12 34 56 78 89 70 89 70 89 70 89 70 89 70 89 70 89 70 89 70 89 70 89 70 89 70 89 70 89 70 89 70 89 70 89 70 89 70 89 70 80 80 80 80 80 80 80 80 80 80 80 80 80	2 4 6 10 21 54 67 106 113 177 205 220 245 221 232 180 173 117 79 42 42 31 21 6 4 17	8 12 32 72 85 116 123 118 146 105 123 102 111 93 82 72 62 61 39 30 32 26 19 17 16 8 12 8 1 1	2 4 6 10 21 54 67 106 113 177 205 270 245 229 244 212 245 202 195 165 160 177 126 129 106 128 93 82 72 61 39 30 32 26 19 17 16 16 16 17 16 16 16 17 16 16 16 16 16 16 16 16 16 16 16 16 16	9 9 47 65 159 197 103 187 122 84 131 140 37 47 19 9 9	4 13 17 38 76 88 88 147 130 122 182 63 59 97 92 67 105 63 55 63 33 21 29 13 8 17 4	9 9 47 65 159 197 103 191 122 97 148 178 113 135 107 166 130 122 182 63 68 106 92 67 105 63 55 63 33 21 29 13 8 17 4	2 4 6 10 30 63 67 153 178 336 402 373 432 343 316 311 313 154 126 61 21 62 9	4 8 25 49 110 161 204 211 265 276 227 305 165 170 190 174 139 167 124 93 65 47 48 30 24 25 16 8 11 11	2 4 6 10 30 63 67 153 178 336 402 373 436 351 341 360 423 326 307 248 311 169 196 199 174 139 167 124 93 65 47 48 30 24 25 16 16 17 18 18 18 18 18 18 18 18 18 18 18 18 18
Γotal	2,445	1,733	4,178	1,393	1,694	3,087	3,838	3,427	7,265

Table 20.--Length composition of scrod and large haddock landed from 5Y North and South, Fall 1956, in hundreds of fish

Length		Y North			Y South		5	Y Total	
(cm.)_	Scrod	Large	Total	Scrod	Large	Total	Scrod	Large	Total
35 6 7 8 9 40 1 2 3 4 5 6 7 8 9 60 1 2 3 4 5 6 7 8 9 70 1 2 3 4 5 6 7 8 9 70 1 2 3 4 5 6 7	1 4 11 19 28 31 48 38 36 40 38 49 63 59 73 69 67 56 52 29 22 10 6 3 1	1 1 2 5 13 15 22 41 50 53 56 57 63 58 48 51 55 42 45 39 28 30 21 20 18 14 9 5 6 6 5 6 6 7	1 4 11 19 28 31 48 38 36 41 39 51 68 72 88 91 108 106 105 85 79 73 64 54 54 54 56 43 45 39 28 30 21 20 18 14 9 5 6 6 5 4 4 3 1	16 16 47 62 109 172 265 436 343 561 530 405 421 249 156 78 31	7 20 46 79 66 158 178 191 297 337 231 218 310 211 119 158 165 125 132 92 106 20 40 26 13 26 20 7 7	16 	1 20 11 19 44 78 110 147 208 305 474 392 624 589 478 490 316 212 130 60 22 10 6 6 3 1	1 1 2 12 33 61 101 107 208 231 247 354 400 289 266 361 203 204 153 162 113 126 38 54 35 18 32 25 11 410 8	1 20 11 19 44 78 110 147 208 306 475 394 636 622 539 591 423 420 361 307 376 410 295 272 364 267 162 203 204 153 162 113 126 38 54 35 18 32 25 11 4 10 8
Total	860	885	1,745	3, 897	3,412	7,309	4,757	4, 297	9,054

Table 21.--Length composition of scrod and large haddock landed from 5Y North and South, Winter 1956, in hundreds of fish

Length	5	Y North	Total	Scrod	5Y South Large	Total	Scrod	Y Total	Total
(cm.)	Scrod	Large	Total	Scrod	Large	1 otai	Scrod	Large	1 otai
35 67 89 40 12 34 56 78 90 12 34 56 78 90 12 34 56 78 90 12 34 56 78 90 12 34 56 78 90 12 90 10 10 90 10 10 10 10 10 10 10 10 10 10 10 10 10	2 5 2 4 13 13 25 16 26 60 49 47 64 69 82 47 31 20 11 9 4	3 10 13 29 37 57 63 77 56 59 56 39 34 40 32 38 14 21 24 24 8 9 5	2 5 2 4 13 13 25 16 60 49 47 64 72 95 76 86 77 74 86 60 59 56 39 40 32 38 41 24 24 89 51 80 80 80 80 80 80 80 80 80 80 80 80 80	9 35 44 53 62 106 159 238 247 221 230 194 168 79 35 18	2 	9 35 44 53 62 108 159 238 250 229 251 222 223 144 126 81 71 75 91 57 45 42 36 26 29 16 13 16 13 8 5 2	2 5 2 4 13 22 60 60 79 122 155 206 302 316 290 312 241 199 99 46 27 13	2 	2 5 2 4 13 22 60 60 79 122 157 206 302 322 308 346 298 291 221 200 167 131 134 147 96 79 82 68 64 43 37 40 37 24 22 13 10 40 40 40 40 40 40 40 40 40 40 40 40 40
Total	668	772	1,440	1,907	888	2,795	2,575	1,660	4,235

Table 22. --Length composition of scrod and large haddock landed from 5Y North and South, 1956 Haddock Year, in hundreds of fish

Length		5Y North	2	t	Y South			5Y Total	
(cm.)	Scrod	Large	Total	Scrod	Large	Total	Scrod	Large	Total
(CIII.)	Scrou	Darge	Total	berou	Darge	Total	berou	Large	Total
9.1	7		7				7		7
31		·							
2 3									
3						4.0			
4				42		42	42		42
5	19		19	42		42	61		61
6	20		20	121		121	141		141
7	40		40	296		296	336		336
8	96		96	275		275	371		371
9	202		202	384		384	586		586
40	266		266	276		276	542		542
1	426		426	711		711	1,137		1,137
2	530		530	432		432	962		962
3	629	8	637	839		839	1,468	8	1,476
4	955	5	960	908		908	1,863	5	1,868
5	1,026	9	1,035	1,246	2	1,248	2,272	11	2,283
6	1,449	29	1,478	1,070		1,070	2,519	29	2,548
7	1,510	70	1,580	1,451	11	1,462	2,961	81	3,042
8	1,571	131	1,702	1,343	39	1,382	2,914	170	3,084
9	1,478	235	1,713	1,196	99	1,295	2,674	334	3,008
			1,113	1,130		1,450	2, 325	615	
50	1,121	369	1,490	1,204	246				2,940
1	692	611	1,303	921	454	1,375	1,613	1,065	2,678
2	630	710	1,340	636	611	1,247	1,266	1,321	2,587
3	298	806	1,104	246	573	819	544	1,379	1,923
4	187	746	933	127	692	819	314	1,438	1,752
5	129	721	850	58	910	968	187	1,631	1,818
6	45	861	906	9	884	893	54	1,745	1,799
7	34	646	680		766	766	34	1,412	1,446
8	12	662	674		846	846	12	1,508	1,520
							7	1,285	
9	7	597	604		688	688			1,292
60	25	551	576	9	589	598	34	1,140	1,174
1	1	503	504	9	403	412	10	906	916
2		415	415		431	431		846	846
3 4		393	393		484	484		877	877
4		253	253		339	339		592	592
5		226	226		324	324		550	550
6		172	172		227	227		399	399
7		158	158		246	246		404	404
8		111	111		117	117		228	228
9		114	114		90	90		204	204
70		90	90		95	95		185	185
1		51	51		26	26		77	77
2		49	49		34	34		83	83
3		31	31		42	42		73	73
4		37	37		11	11		48	48
5		17	17		2	2		19	19
6		4	4		7	7		11	11
7		6	6		7	7		13	13
8		1	1		'	'		1	1
			1						
9									
80		4	4					4	4
Total	13,405	10,402	23,807	13, 851	10,295	24,146	27,256	20,697	47,953
		10, 100	20,000	10,001	,	,			,

Table 23.--Age-length composition of haddock discarded at sea in 5Z, 1956 Haddock Year, in hundreds of fish

		5Z]	East					West		
Length	7	Zears	of age_		_		Years	of age		
(cm.)	1	2	3	4	Total	1	2	3	4	Total
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50	1 1 1 1 2 2 3 7 10 21 33 63 75 88 80 95 188 73 59 83 16	13 63 101 126 94 235 257 214 277 126 153 79 52 27 14 6	16 28 79 12 30	12 16 10 7 - 4 4 3 3 1	1 1 1 2 2 3 7 10 21 33 63 88 151 181 237 282 308 316 309 305 237 165 119 59 27 14 64 4 3 	2 2 5 11 18 42 79 96 116 94 120 89 75 38 24	24 		1 2	2 2 5 11 18 42 79 96 116 118 120 89 75 76 71 61 77 95 47 21 15 4 3 1
Total	902	1,837	165	57	2,961	811	432		3	1,246

Table 24.--Age-length composition of haddock landed from 5Z East, February 1956, in hundreds of fish

			Yea	r s	o f	a g e			
Length (cm.)	2	3	4	5	6	7	8	9+	Total
35 6 7 8 9 40 1 2 3 4 5 6 7 8 9 50 1 2 3 4 5 6 7 8 9 60 1 2 3 4 5 6 7 8 9 6 0 1 2 3 4 5 6 7 8 9 6 7 8 9 7 8 9 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 7 8	17 15 54 2 35	6 8 115 107 11 104 289 246 459 141 8 54 2	103 69 392 288 425 246 452 626 797 813 813 913 748 699 440 245 228 279 131	35 	124 	27 	29 79 117 83 49 94 152 46 34 13 44 51 38	23 	23 23 115 161 151 208 392 577 531 738 912 1,017 1,005 1,135 1,136 1,117 1,148 1,344 816 764 675 771 481 646 545 418 317 304 304 291 190 228 139 101 38 177 127 51 38 76
Total	123	1,625	8,822	2,711	3,501	1,262	829	357	19,230

Table 25. -- Age-length composition of haddock landed from 5Z East, March 1956, in hundreds of fish

40	Length (cm.)	2	3	<u>Үеа</u>	r s	o f 6	a g e	8	9+	Total
	40 1 2 3 4 5 6 7 8 9 50 1 2 3 4 5 6 7 8 9 7 0 1 2 3 4 5 6 7 8 9 7 0 1 2 3 4 5 6 7 8 9 7 0 1 2 3 4 5 6 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 8 9 7 8 9 7 8 9 7 8 8 9 7 8 9 7 8 8 9 7 8 9 7 8 9 7 8 8 9 7 8 8 7 8 8 7 8 7	19	58 212 463 123 61 90 34	174 58 370 212 463 615 957 824 902 933 648 437 592 257 223 307 136	212 123 241 379 157 193 186 134 285 160 117 128 52 28 68 57 38	2 120 189 101 109 424 340 417 362 311 164 113 114 58 141 73 47	135 96 2 52 190 68 171 38 85 48 - 28 14 	114 96 85 24 93 55 27 14	47 13 14 21 31	116 174 116 463 636 926 984 1,261 1,269 1,158 1,023 841 986 863 498 415 519 249 311 145 187 83 83 41 21 41 62

Table 26.--Age-length composition of haddock landed from 5Z East, April 1956, in hundreds of fish

Length (cm.)	2	3	<u>Y e a</u>	5 5	o f	a g 6	<u> </u>	9+	Total
39 40 1 2 3 4 5 6 7 8 9 50 1 2 3 4 5 6 7 8 9 60 1 2 3 4 5 6 7 8 9 6 7 8 9 1 2 3 4 5 6 7 8 9 1 8 9 1 8 9 1 8 1 8 1 8 1 8 1 1 2 3 4 4 1 2 3 4 4 5 1 8 1 2 3 4 4 1 2 3 4 4 4 5 1 2 3 4 4 4 5 7 8 1 2 3 4 4 4 4 5 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7	8	25 87 66 74 9 31	56 16 49 86 119 66 74 47 197 94 129 230 99 33 43 24 22 22 21	18 	9 15 28 19 107 40 32 57 134 31 9 20 9 20 7	2 16 16 22 37 6 29 6 13 7	5 20 16 7 6	3	74 49 49 173 149 198 148 74 246 124 203 266 153 49 99 193 79 79 178 99 20 79 40 20 20
Total	8	292	1,470	422	537	154	54	23	2,960

Table 27. -- Age-length composition of haddock landed from 5Z East, May 1956, in hundreds of fish

Length			<u>Y</u> e	ars	o f	a g	e		
(cm.)	2	3	4	5	6	7	8	9+	Total
36 7 8 9 40 1 2 3 4 5 6 7 8 9 50 1 2 3 4 5 6 7 8 9 60 1 2 3 4 5 6 7 8 9 6 7 8 9 9 6 7 8 9 9 9 9 9 9 9 9 9 9 9 9 9	113 50 130 369 416 404 443 313 170 61 59 103	7 12 28 38 90 89 210 212 508 524 205 322 400 402 133 126 27 35	45 177 105 298 444 231 514 406 561 455 367 483 295 205 166 27 87 85 35 16 9 1	52 	56 	46 	15 34 31 6 57 5 104 4 8 10	2 2 5 8	113 57 142 397 454 539 709 680 680 1,069 814 843 820 961 924 613 651 536 436 415 301 394 117 208 124 114 156 114 52 104 21 21 31 10
Total	2,631	3,394	5,014	1,162	785	433	274	17	13,710

Table 28.--Age-length composition of haddock landed from 5Z East, June 1956, in hundreds of fish

Length			Υe	ars	o f	a g e			
(cm.)	2	3	4	- 5	6	7	8	9+	Total
35 6 7 8 9 40 1 2 3 4 5 6 7 8 9 50 1 2 3 4 5 6 7 8 9 60 1 2 3 4 5 6 7 8 9	44 22 272 204 434 877 751 375 267 261 31 65 97	39 18 33 79 167 75 178 326 273 575 195 360 367 218 219 124 29 4 16 1 13	83 150 89 458 243 253 486 453 584 399 591 561 417 231 202 16 48 46 13 	44 1 27 51 36 120 37 137 174 145 78 52 30 28 10 4 16 3	31 	52 	23 13 10 3 5	1 6	44 22 311 222 467 956 1,001 578 1,045 578 894 805 916 951 653 990 759 692 559 484 173 209 106 80 40 27 67
Total	3,700	3,309	5,332	993	635	226	54	7	14,256

Table 29.--Age-length composition of haddock landed from 5Z East, July 1956, in hundreds of fish

Length			Y e	ars	o f	a g e			
(cm.)	2	3	4	5	6	7	8	9+	Total
32 34 55 66 78 99 40 12 34 56 78 99 50 12 34 56 78 99 60 12 33 44 56 78 99 60 12 33 44 56 78 99 60 12 33 44 56 78 78 78 78 78 78 78 78 78 78 78 78 78	16 78 157 314 412 705 846 965 930 677 618 342 78 123 175	59 64 65 87 207 135 413 426 671 1,091 349 535 484 343 148 87 21 2 38 13	103 271 206 598 591 483 873 676 784 617 507 439 333 164 152 38 45 82 13 10 5	103 34 77 57 124 36 97 123 110 189 45 55 27 23 11 21 5 1	74 	77 57 38 23 27 13 45 21 18 17 13 6 21 7 1	19 	1 1 11 6 2 11 2	16 16 78 157 314 471 769 911 1,052 1,240 1,083 1,340 1,366 1,414 1,697 1,431 1,365 1,268 1,017 841 598 544 396 371 417 203 191 79 90 73 85 34 34 17 66 17 66 17 66 17 66 17 66 17 66 17 66 17 66 17 66 17 66 17 66 17 66 17 66 17 66 17 66 17 66 17 66 17 66 67 67 67 67 67 67 67 67 67 67 67 67
Total	6,452	5,238	6,994	1,143	752	385	106	34	21,104

Table 30. -- Age-length composition of haddock landed from 5Z East, August 1956, in hundreds of fish

Length				Y e a			a g e			
(cm.)	1	2	3	4	5	6	7	8	9+	Total
33 4 5 6 7 8 9 40 1 2 3 4 5 6 7 8 9 6 0 1 2 3 4 5 6 7 8 9 6 7 1 2 3 4 5 6 7 8 9 6 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 7 8	26	29 32 88 204 350 672 942 817 1,642 1,338 1,392 610 746 664 416 457 171 18	117 430 584 178 428 670 137 664 429 572 370 136 88 18 29	117 110 90 108 122 406 267 329 328 798 452 473 533 284 213 203 95 52 138 44 17 19	29 150 144 123 104 92 106 95 78 62 8 24 10 14 2	50 48 35 155 115 103 67 52 43 17 47 10 18 13 4 1	26 23 51 14 43 8 10 3 2 13 2 4 4 4	43 8 9 9 1 1	9	29 58 88 204 467 1,373 1,518 1,753 1,403 1,175 1,403 1,593 1,175 1,403 1,363 753 753 755 727 563 444 493 277 183 200 177 553 322
Total	26	10,588	4,850	5,198	1,042	781	205	71	13	22,77

Table 31. --Age-length composition of haddock landed from 5Z East, September 1956, in hundreds of fish

Length			<u>Y</u> e a	r s	o f	a g e			
(cm.)	2	3	4	5	6	7	8	9+	Total
35 6 7 8 9 40 1 2 3 4 5 6 7 8 9 50 1 2 3 4 5 6 7 8 9 60 1 2 3 4 5 6 7 8 9 6 7 8 9 6 7 8 9 6 7 8 9 7 8 9 7 8 9 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 7 8	31 63 118 376 409 388 763 938 772 344 327 171 229 194 43 5	39 186 277 125 238 376 59 171 234 241 92 83 80 5 6 9	55 51 63 60 68 178 76 180 115 191 213 379 171 94 103 65 53 37 54 20 10 26 1	6 38 68 32 34 36 36 51 55 24 5 9 13 22 8	10 23 9 52 45 36 29 36 20 9 19 13 14 22 13 	9 18 6 19 5 13 10 17 22 5 17 6 3 2	19 4 13 7 6 2 2	7	31 63 157 376 595 720 814 1,126 1,070 788 643 550 222 189 161 148 128 78 78 28 44 33 28 44 41 41 41 41 41 41 41 41 41 41 41 41
Total	5,171	2,221	2,263	437	355	161	56	25	10,689

Table 32.--Age-length composition of haddock landed from 5Z East,
October 1956, in hundreds of fish.

Length				Yеа	rs o	f ag	е			
(cm.)	1	2	3	4	5	6	7	8	9+	Total
34 5 6 7 8 9 40 1 2 3 4 5 6 7 8 9 50 1 2 3 4 5 6 7 8 9 6 7 8 9 6 7 8 9 6 7 8 9 6 7 8 9 6 7 8 9 6 7 8 9 8 9 8 9 8 9 8 9 8 9 8 9 8 9 8 9 8	12	16 138 248 290 552 758 786 1,738 1,287 1,280 708 773 546 376 251 59 11	96 345 563 171 393 777 145 546 393 314 136 110 44 11 33 10	113 117 87 99 142 419 236 295 176 327 332 260 300 120 166 115 49 42 57 15 9	1 17 93 100 78 36 69 62 49 62 26 4 15 3 6	25 	9 17 31 7 14 5 2 13	. 14 5 2 2 6	1	28 138 248 386 552 1,103 1,462 1,545 1,545 1,772 1,627 1,337 1,328 1,065 766 539 535 437 422 252 339 280 140 146 83 57 32 45 13 6 13 6 6
Total	12	9,817	4,087	3,480	622	427	101	29	1	18,576

Table 33.--Age-length composition of haddock landed from 5Z East, November 1956, in hundreds of fish.

Table 34. -- Age-length composition of haddock landed from 5Z East, December 1956, in hundreds of fish

Length (cm.)	2	3	<u>Ү</u> е	a r s	o f	age	8	9+	Total
35 6 7 8 9 40 1 2 3 4 5 6 7 8 9 50 1 2 3 4 5 6 7 8 9 6 7 8 9 6 7 8 9 6 6 7 8 9 6 6 7 8 8 9 8 9 6 6 7 8 8 9 8 9 8 9 8 9 8 9 8 9 8 9 8 9 8 9	19 115 63 356 576 723 922 488 577 314 429 196 176 73	2 21 63 162 35 21 30 66 49 35 43 52 189 3 6	84 6 137 35 31 60 4 104 65 19 37 12 61 55	1 4 35 4 11 60 22 12 36 17 37 40 54 36 37	2 22 36 4 61 73 19	4 20 73 36	18		21 136 126 356 576 723 922 650 696 335 466 262 366 178 78 125 193 167 109 37 37 37 109 37 37 37 37
Total	5,027	777	710	406	217	133	18		7,288

Table 35. -- Age-length composition of haddock landed from 5Z East, January 1957, in hundreds of fish

Length (cm.)	2	3	Y e	ars	o f	a g	e 8	9+	Total
35 6 7 8 9 40 1 2 3 4 5 6 7 8 9 50 1 2 3 4 5 6 7 8 9 60 1 2 3 4 5 6 7 8 9 6 7 8 9 6 7 8 9 8 9 7 8 9 8 9 7 8 9 8 9 8 9 7 8 9 8 9	6 17 27 72 131 223 327 163 213 282 289 202 134 36	1 3 26 54 19 4 71 14 53 139 81 199 3 25	30 1 1 95 53 101 92 12 115 111 81 66 28 28	1 52 11 13 68 31 53 66 39 100 32 18 18 10 31	1 2 	11 35 10 78 31 11 21 16 5 2 2 2	21 13 4 15 5 4 2 2 2 5 2	4 3 10 1 1 4 3 4	7 20 53 72 131 223 327 217 243 301 294 274 244 194 252 188 211 186 172 159 198 88 100 100 83 78 36 21 26 26 21 21 31 30 30 30 30 30 30 30 30 30 30 30 30 30
Total	2,122	692	832	544	218	238	74	30	4,750

Table 36. -- Age-length composition of haddock landed from 5Z East, 1956 Haddock Year, in hundreds of fish

Length	2	3	4	5	6	7	ρ	0+	Total
(cm.) 1 32 3 4 38 5 6 7 8 9 40 1 2 3 4 5 6 7 8 9 50 1 2 3 4 5 6 7 8 9 60 1 2 3 4 5 6 7 8 9 8 9 1 2 3 4 5 6 7 8 9 8 9 1 2 3 4 5 6 7 8 9 8 9 8 1 2 3 4 5 6 7 8 9 8 9 8 1 2 3 4 5 6 7 8 9 8 9 8 9 8 1 2 3 4 5 6 7 8 9 8 9 8 9 8 1 2 3 4 5 6 7 8 9 8 9 8 9 8 1 2 3 4 5 6 7 8 9 8 9 8 9 8 9 8 9 8 9 8 9 8 9 8 9 8	16 70 126 524 1,155 1,673 3,356 4,754 5,753 8,233 6,217 6,163 3,813 3,282 2,359 1,909 1,030 273 34	3 11 40 653 201 1,098 1,815 464 1,593 1,895 3,404 2,839 4,107 1,950 2,545 2,358 1,570 1,407 478 33 130 51 101 1 61	159 409 1,124 1,270 1,799 2,210 3,280 2,839 5,001 4,086 5,315 4,862 4,061 2,902 1,815 1,507 945 600 462 500 36 132 67 	53 	161 256 2 85 244 8 691 422 695 1,318 1,410 1,254 11,251 11,045 618 347 400 416 314 348 112 63 87 7 7 35 1	175 	57 	9+ 49 17 3 95 25 22 60 39 120 106 12 4 101 3 4 41	Total 164 71 164 533 1, 195 2, 326 3, 557 6, 064 7, 977 9, 822 9, 564 9, 922 9, 564 9, 926 8, 593 7, 236 6, 256 5, 120 4, 612 4

Table 37. -- Age-length composition of haddock landed from 5Z West, February 1956,

in hundreds of fish

ength			ars	o f	a g e				
(cm.)	2	3	4	5	6	7	8	9+	Total
33 4 5 6 7 8 9 40 1 2 3 4 5 6 7 8 9 6 7 8 9 6 7 8 9 6 7 8 9 6 7 8 9 6 7 8 9 7 8 9 7 8 9 8 9 7 8 9 8 9 7 8 9 8 9	14 11 31 109 113 130 188 70	2 5 28 78 71 117 67 164 188 165 465 181 156 28 12	26 117 167 164 187 313 90 346 375 477 495 231 272 85 113 76 70 44 13 10	53 52 54 92 13 58 79 42 72 13 70 49 10 52 16 10	2 31 70 50 42 72 38 94 90 123 50 43 67 78 30 51 19 62	30 	13 	12 17 7 5 9	1 -1 3 10 14 23 18 14 23 32 37 53 56 61 39 35 21 25 14 23 17 17 17 12 12 12 12 12 12 12 12 12 12 12 12 12

Table 38, -- Age-length composition of haddock landed from 5Z West, March 1956, in hundreds of fis1

Length				<u>Y e a</u>	r s	o f	a g e		
(cm.)	2	3	4	5	6	7	8	9+	Total
37 8 9 40 1 2 3 4 5 6 7 8 9 5 0 1 2 3 4 5 6 7 8 9 6 7 8 9 6 7 8 9 6 7 8 9 7 8 9 7 8 9 8 9 7 8 9 8 9 8 9 7 8 9 8 9	55 22 92 83 69	6 55 70 69 16 42 97 100 268 142 177 11 10 13 10	19 70 39 41 97 200 47 198 299 285 362 219 256 280 320 308 158 159 95 16 11	33 1 4 48 11 32 84 42 36 71 136 168 37 61 11 26 27 20	55 39 36 71 57 103 128 130 62 46 143 39 53 34 38 32	4 36 10 79 8 62 33 24 13 27 7 7 30	14 	16 	55 28 166 83 139 139 55 83 194 333 316 344 476 333 377 317 389 322 428 450 378 450 339 206 156 134 167 78 134 67 78 45 11 45 22
Total	321	1,086	3, 484	848	1,066	340	146	79	7,370

Table 39. --Age-length composition of haddock landed from 5Z West, April 1956, in hundreds of fish

Length (cm.)	2	3	<u>Y e</u> 4	ars 5	0 f 6	age 7	8	9+	Total
36 7 8 9 40 1 2 3 4 5 6 7 8 9 50 1 2 3 4 5 6 7 8 9 60 1 2 3 4 5 6 7 8 9 60 1 2 3 4 5 6 7 8 9 9 1 1 2 3 4 5 6 7 8 9 9 9 1 1 2 3 4 4 5 6 7 8 9 9 9 1 1 2 3 4 4 5 6 7 8 9 9 9 9 9 9 1 1 1 1 1 1 1 1 1 1 1 1 1	20 20 33 34 346 204	8 20 203 173 105 81 92 146 214 244 211 22 13 3	7 173 261 82 91 293 38 341 368 529 461 363 260 400 219 252 113 71 50 4 9 11	49 1 7 76 36 48 72 89 59 82 39 75 9 32 8 15 35 17 10	15 91 51 59 82 53 61 85 64 41 52 75 53 36 39 21 39	11 	17 	9 13 11 19 7 4 9	20 20 41 61 346 407 346 366 163 183 488 253 579 620 508 524 396 416 224 213 190 108 112 153 87 78 41 55 46 32 28 55 59 99 99 99 99 99 99 99 99 99 99 99
Total	657	1,537	4,396	759	917	329	190	72	8,857

Table 40. -- Age-length composition of haddock landed from 5Z West, May 1956, in hundreds of fish

Length				a r s	o f	a g e			
(cm.)	2	3	4	5	6	7	8	9+	Total
33 4 5 6 7 8 9 4 0 1 2 3 4 5 6 7 8 9 6 0 1 2 3 4 5 6 7 8 9 6 0 1 2 3 4 5 6 7 8 9 6 0 1 2 3 4 5 6 7 8 9 7 8 9 8 9 8 9 7 8 9 8 9 7 8 9 8 9	21 21 149 256 383 606 852 887 854 734 809 431 307 214 170 107	76 114 395 130 103 289 212 389 364 560 239 392 495 165 96 27 21 15	56 127 202 287 137 383 625 532 1,111 875 934 786 703 903 540 244 188 253 78 30 12	58 53 48 126 114 272 188 22 199 99 243 189 69 39 75 68 15 87 24	37 91 50 45 159 119 221 269 207 193 134 162 111 107 51 123 103 23 38 11 6	28 31 24 22 60 22 27 115 78 90 86 59 50 72 68 54 33 31 23 46 11 3 4 2	45 30 25 36 86 27 17 46 63 23 23 6 11 6 2	12 13 17 31 7 11 6 6 6 11 6 6	2: 148 256 388 688 853 1,000 1,300 999 1,112 1,000 656 980 1,213 1,398 1,431 1,57 1,348 1,06 1,018 1,0
Total	6,801	4,082	9,586	1,990	2,414	1,079	446	141	26,539

Table 41. -- Age-length composition of haddock landed from 5Z West, June 1956, in hundreds of fish

Length (cm.)	2	3_	<u>Y</u> 4	5 a r s	o f	a g	<u>e</u> 8	9+	Total
35 6 7 8 9 40 1 1 2 3 4 5 6 7 8 9 50 1 2 3 4 5 6 7 8 9 6 0 1 2 3 4 5 6 7 8 9 7 0 1 2 3 4 5 6 7 8 9 7 0 1 2 3 4 5 6 7 8 9 7 8 9 7 8 9 7 8 9 8 9 7 8 9 7 8 9 8 9	60 199 318 407 876 935 872 988 1,057 682 621 308 207 107	540 518 190 107	57 173 264 455 277 552 758 575 1,249 1,052 857 1,159 1,108 847 734 301 192 269 107 47 13	70 53 57 186 159 296 295 28 299 147 301 203 73 53 96 98 23 94 25	68 96 90 57 239 176 273 275 220 268 173 222 257 121 115 69 160 180 41 18 16 2	40 32 44 28 88 27 27 123 107 115 123 94 54 76 92 71 60 69 36 10 62 9 4 2	57 	13 18 31 36 4 4 9 5 4 6 8 8	60 199 318 458 876 1,055 1,334 1,334 1,453 1,327 1,447 1,466 1,316 1,589 2,042 1,769 1,471 1,695 1,241 1,405 1,145 902 697 685 535 460 443 468 309 267 276 284 301 192 142 109 88 88 88 88 88
Total	7,637	5,061 1	2,294	2,560	3,136	1,399	549	150	32,786

Table 42. -- Age-length composition of haddock landed from 5Z West, July 1956, in hundreds of fish

Length				a r s	o f	a g e			
(cm.)	2	3	4	5	6	7	8	9+	Total
33 4 5 6 7 8 9 40 1 2 3 4 5 6 7 8 9 6 0 1 2 3 4 5 6 7 8 9 7 0 1 2 3 4 5 6 7 8 9 7 0 1 2 3 4 5 6 7 8 9 7 0 1 2 3 4 5 6 7 8 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 7 8	21 11 21 106 170 340 376 326 252 286 156 158 53 56 38	21 49 152 44 36 106 109 132 136 207 112 168 211 144 83 56 49 13	21 44 71 104 71 96 205 551 404 400 497 473 651 405 450 197 142 144 71 17 8	20 19 23 63 49 170 132 13 113 69 210 154 47 35 70 67 9 54 17	27 42 31 26 90 82 167 204 120 176 119 142 96 70 74 34 72 69 21 22 7 8	12 14 15 13 41 15 20 66 71 77 76 35 31 50 46 32 23 36 17 14 26 2 2 2	38 17 16 25 57 16 11 44 35 14 13 8 3 1	8 8 11 17 5 16 2 1 5 6 2 4	21 11 11 106 191 340 425 499 340 393 366 338 281 417 469 686 662 672 867 734 759 657 642 593 520 377 353 317 285 174 137 128 1191 128 1191 1191 1191 1191 1191 1
Total	2,381	1.832	5,227	1,336	1.699	738	299	85	13,597

Table 43. -- Age-length composition of haddock landed from 5Z West, August 1956, in hundreds of fish

Table 44. --Age-length composition of haddock landed from 5Z West, September 1956, in hundreds of fish

Length (cm.)	1	2	3	<u>Y e a</u>	rs o 5	f ад	д <u>е</u> 7	8	9+	Total
34 5 6 7 8 9 40 1 2 3 4 5 6 7 8 9 6 7 8 9 6 7 8 9 6 7 8 9 6 7 8 9 6 7 8 9 6 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 7 8	23	28 216 204 867 1, 428 2, 804 2, 592 3, 580 3, 407 3, 721 2, 823 2, 562 1, 680 1, 040 282 149 58 78 51	287 11,064 830 446 746 591 803 322 130 198 52 159 82 68 39 13 26 13	150 182 790 403 287 522 161 312 320 388 235 277 167 171 90 117 144 555 	150 	22 26 41 34 39 64 39 96 19 92 81 78 26 69 16 81	13 13 39 38 13 16 12 4	23 13 15 4	15 15 6 4 12	51
Total	23	27,570	5,885	4,784	1,023	823	154	55	52	40,369

Table 45.--Age-length composition of haddock landed from 5Z West, October 1956, in hundreds of fish

Length				Y e a		o f	a g e			
(cm.)	1	2	3	4	5	6	7	8	9+	Total
35 67 89 40 12 34 56 78 90 12 34 56 78 90 12 34 56 78 90 12 34 56 78 90 12 34 56 78 90 10 10 10 10 10 10 10 10 10 10 10 10 10	5	59 129 97 322 582 870 1,261 1,420 1,178 1,409 1,204 800 618 380 239 114 88 64	140 367 313 196 238 206 251 96 288 55 189 70 73 31 21 228 17 16	64 57 275 133 217 414 224 366 309 371 254 252 272 181 117 94 88 48 	64 	24 28 35 36 42 84 32 59 16 96 90 71 24 54 17 16	14 17 32 32 12 17 18 27 11 4 1	24 12 16 4 1	16 16 17 3 1 1 1 3	64 129 97 322 582 870 1,401 1,545 1,722 1,528 1,095 1,099 743 706 736 560 517 511 488 425 377 307 285 206 176 128 144 90 95 84 49 49 49 49 16 35 41 11 11 33 3
Total	5	10,933	2,861	3,762	920	724	186	58	57	19,506

Table 46. -- Age-length composition of haddock landed from 5Z West, November 1956, in hundreds of fish

(cm.) 1 2 3 4 5 6 7 8 9+ To 36 28 55 83 8 217 83 8 217 9 310 23 40 521 1 7000 22 983 3 833 4 1,070 64 5 1,1,09 38 1 1,1,052 69 1 1,1,052 69 1 1,1,052 69 1 1,1,052 69 1 1,1,052 69 1 1,1,052 69 1 1,1,052 69 1 1,1,052 69 1 1,1,052 1,1,052 69 1 1,1,052 <th>Length</th> <th></th> <th></th> <th></th> <th>Y e a</th> <th>rs c</th> <th>f</th> <th>a g e</th> <th></th> <th></th> <th></th>	Length				Y e a	rs c	f	a g e			
7 83 9 310 23 40 521 1 700 2 983 3 833 4 1,070 64 5 1,049 38 1 6 1,052 69 1 7 562 102 97 1 8 710 52 42 4 9 178 100 117 50 157 177 177 79 1 167 237 147 39 2 67 150 191 49 8 3 21 106 227 98 33 4 53 340 104 26 5 143 221 143 16 6 12 337 148 69 23 7 17 345 121 52 17 8 21 198 <td< th=""><th>(cm.)</th><th>1</th><th>2</th><th>3</th><th>4</th><th>5</th><th>6</th><th>7</th><th>8</th><th>9+</th><th>Total</th></td<>	(cm.)	1	2	3	4	5	6	7	8	9+	Total
2 3 4 12 6 13 6 3 4 15 5 5 7 6 3 3 6 7 8 12 12 15 15 17 17 17 17 18 12 12 12 12 12 13 15 15 15 15 15 17 17 17 17 17 18 18 12 12 12 12 12 12 12 12 12 12 12 12 12	7 8 9 40 1 2 3 4 5 6 7 8 9 9 0 1 2 3 4 5 6 7 8 9 7 8 9 7 1 2 3 4 5 6 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 7 8	28	83 217 310 521 700 983 833 1,070 1,049 1,052 562 710 178 157 167 67	64 38 69 102 52 100 177 237 150 106 53 143 12 17 21	1 97 42 117 177 147 191 227 340 221 337 345 198 150 113 61 62 43 12	4 79 39 49 98 104 143 148 121 125 120 62 98 41 50 37 40 22 8 31	33 26 16 69 52 73 80 103 98 41 86 101 40 65 22 46 19 58 23 12	17 21 19 52 25 34 28 12 40 32 45 31 39 17 6 25 5 3 12	25 14 12 19 8 8 13 25 5	6 12	83 217 333 5217 700 983 833 1,134 1,088 1,122 808 395 590 465 523 589 552 448 369 3199 207 174 141 75 116 58 62 25 17 12 46 17 18 18 18 18 18 18 18 18 18 18 18 18 18

Table 47. -- Age-length composition of haddock landed from 5Z West, December 1956, in hundreds of fish

Length				Y e a		of a	a g e			
(cm.)	1	2	3	4	5	6	7	8	9+	Total
35 67 89 40 12 34 56 78 90 12 34 56 78 90 12 34 56 78 90 12 34 56 78 90 12 34 56	8	22 16 108 84 256 324 767 839 1,058 964 1,160 993 540 589 262 192 197 126 29	2 20 58 44 74 121 59 163 205 278 257 139 73 184 15 18 24 9	4 1 3 103 44 187 202 184 301 269 466 295 388 370 232 202 111 48 85 53 13 10 16	3 5 78 114 142 188 155 132 147 161 61 37 40 16 10 22 5	13 38 37 21 76 59 89 108 101 76 56 105 100 41 47 32 32 27 44 20 10 15	29 18 24 27 51 19 47 35 12 41 23 63 21 53 15 5 13 5 4 2	12 	9	2 2 10 8 27 32 76 83 1,06 1,02 1,20 1,07 76 69 61 68 66 59 52 49 33 24 27 25 17 15 10 10 8 8 4 4 4 2 2 1

Table 48. -- Age-length composition of haddock landed from 5Z West, January 1957, in hundreds of fish

				Y e a	a r s	o f	a g e			
Length (cm.)	1	2	3	4	5	6	7	8	9+	Total
35 6 7 8 9 40 1 2 3 4 5 6 7 8 9 50 1 2 3 4 5 6 7 8 9 6 0 1 2 3 4 5 6 7 8 9 8 0 1 2 3 4 5 6 7 8 9 8 0	4	24 9 37 26 60 218 310 513 603 582 645 579 491 391 241 132 148 71 27	2 5 35 21 37 88 30 108 106 215 143 122 56 84 12 23 7	83 24 132 96 83 167 213 333 248 230 171 94 45 62 49 15 7	3 23 23 45 87 113 125 139 91 150 138 52 72 41 56 46 29 19 5 29 5	6 29 27 14 66 45 103 94 84 72 54 97 124 29 57 15 44 14 33 22 14 15	24 12 22 22 40 18 34 32 16 29 29 30 29 28 16 7 3 6	12 18 14 15 14 7 14 3 5	7 2 8 5 8	26 13 37 26 65 218 310 513 603 617 666 662 448 481 357 469 432 478 557 435 574 408 540 425 2234 216 108 124 50 109 42 33 43 43 43 44 84 84 84 84 84 84 84 84 84 84 84 84
Total	4	5,107	1,114	2,644	1,291	1,058	409	102	38	11,767

Table 49. -- Age-length composition of haddock landed from 5Z West, 1956 Haddock Year, in hundreds of fish

(cm.) 1 2 3 4 5 6 7 8 9+ 333 566 2	ength					ars	o f	a g e			
4 23 60 6 42 972 7 1,700 8 3,137 190 9 5,623 201 52 40 8,333 283 1 8,997 1,829 134 2 10,290 712 704 3 10,433 2,256 1,008 4 10,436 2,768 1,135 5 9,297 2,105 1,148 283 6 7,421 2,981 2,146 136 1 7 4,957 3,175 3,364 159 2 1 8 4,285 3,674 3,118 200 1 9 1,554 2,520 5,248 270 50 910 1,927 5,935 1,056 178 1 1 792 2,874 4,838 934 80 125 2 531 1,286 5,138 1,933	(cm.)	1	2	3	4	5	6	7	8	9+	Total
9 80 23 1 8 2 6 6 3 4 6 5 6 4	4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 8 9 8 9 8 9 8 9 8 9 8 9 8 9 8 8 9 8 9 8 9 8 9 8 9 8 8 9 8 9 8 9 8 9 8 8 9 8 9 8 9 8 8 9 8 9 8 8 9 8 8 8 8 9 8 8 9 8 8 8 8 9 8 8 8 8 8 8 8 8 8 9 8	5	60 336 972 1,700 3,137 5,623 8,333 8,997 10,290 10,403 10,436 9,297 7,421 4,957 4,285 1,554 910 792 531 77 135	9 190 201 283 1,829 712 2,256 2,768 2,105 2,981 3,175 3,674 2,520 1,927 2,874 1,288 1,374 552 734 150 126 160 50 28 47 23	134 704 1,008 1,135 1,148 2,146 3,364 3,138 4,908 6,166 3,996 4,271 2,824 1,93	136 159 200 270 1,056 934 1,093 1,196 1,553 1,262 1,523 1,399 818 613 598 508 283 468 302 133 63 82	178 80 562 411 351 792 813 965 1,389 1,354 1,031 861 1,361 1,082 726 522 719 607 195 237 143 70	77 83 63 137 265 111 193 592 525 497 600 330 232 368 328 295 275 349 151 122 211 75 22 23 16	34 206 151 163 107 212 377 118 104 262 168 66 157 65 54 41	33 41 39 106 47 117 80 17 68 12 27 50 46 8 36 23 8 6	58 83 350 1,014 1,700 3,327 5,876 8,616 10,960 11,706 13,667 14,339 12,833 12,684 11,657 11,277 9,643 8,689 8,049 7,897 7,347 6,825 5,593 5,171 4,592 10,668 1,496 12,234 11,223 853 673 427 472 224 133 91 81 664 427 472 224 133 91 81 666 427 472 472 472 472 472 472 472 472 472

Table 50. -- Age-length composition of haddock landed from 5Z (East and West combined), February 1956, in hundreds of fish

(cm.) 2 3 4 5 6 7 8 9+ Total 33

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Table 51. --Age-length composition of haddock landed from 5Z (East and West combined), March 1956, in hundreds of fish

Length	2	3	Y e 4	a r s 5	of a	. g e	8	9+	Total
37 8 9 40 1 2 3 4 5 6 7 8 9 50 1 2 3 4 5 6 7 8 9 70 1 2 3 4 5 6 7 8 9 70 1 2 3 4 5 6 7 8 9 8 9 80	55 22 92 103 69	6 55 58 70 127 16 254 560 223 329 142 267 45 10 9 14 10	19 39 174 128 409 253 560 815 1,004 1,022 1,201 1,218 1,010 656 848 537 543 615 294 159 204 5 16 11	93 212 156 242 383 157 241 197 166 369 202 153 199 135 220 65 129 57 49 26 27 14 20	123 2 189 156 148 424 376 487 418 413 292 243 176 104 284 112 100 48 66 32	32 4 135 96 36 2 2 62 270 76 234 71 109 61 27 28 21 7 40 31	14 28 2 114 130 85 24 120 77 47 20 11 10 7	16 19 47 11 13 14 36 46 11 11 41	55 28 166 200 313 255 518 719 1,120 1,317 1,577 1,547 1,491 1,400 1,158 1,375 1,259 1,108 1,375 1,259 1,108 1,375 1,108 1,375 1,108 1,375 1,108 1,312 864 859 455 613 384 478 223 321 150 161 86 86 84
Total	341	2,195							

Table 52.--Age-length composition of haddock landed from 5Z (East and West combined), April 1956, in hundreds of fish

Length (cm.)	2	3	Y e a	r s o	fage 6	7	8	9+	Total
36 7 8 9 40 1 2 3 4 5 6 7 8 9 50 1 2 3 4 5 6 7 8 9 60 1 2 3 4 5 6 7 8 9 70 1 2 3 4 5 6 7 8 9 70 1 2 3 4 5 6	20 20 33 34 354 204	3 8 20 25 203 260 105 147 166 155 214 244 242 	63 16 49 259 380 148 165 340 235 435 497 759 560 396 303 443 243 274 135 71 71 4 9	18 30 66 58 50 37 28 110 62 48 109 116 74 87 39 97 14 37 18 21 35 17 10	9 15 15 28 91 70 107 99 114 109 194 115 73 61 61 75 73 36 39 28 39	2 11 16 16 59 25 83 12 70 41 12 31 17 7 8 31 21 18	18 	9 3 -3 13 -7 21 4 9	20 20 41 135 395 456 519 515 361 331 562 499 716 782 886 661 573 390 288 128 191 193 87 146 87 78 61 55 61 55 61 61 61 61 61 61 61 61 61 61 61 61 61
Total	665	1,829	5,866	1,181	1,451	483	245	97	11,817

Table 53.--Age-length composition of haddock landed from 5Z (East and West combined), May 1956, in hundreds of fish

Length _ (cm.)	2	3	Y	ear: 5	s o f	age 7	8	9+	Total
33 4 5 6 7 8 9 40 1 2 3 4 5 6 7 8 9 60 1 2 3 4 5 6 7 8 9 80 1 2 3 4 5 6 7 8 9 80 1 2 3 4	21 21 149 369 433 736 1,221 1,303 1,258 1,177 1,122 601 368 273 273 105	7 88 28 152 485 219 313 501 720 913 569 883 639 794 628 291 96 53 21 27 -35 15	101 304 307 585 581 614 1,139 937 1,672 1,330 1,301 1,269 998 1,108 746 567 331 273 288 78 16 9	52 -79 97 48 193 189 293 341 176 324 237 331 245 139 70 91 106 15 94 24 2 2 2	56 	46 	15 34 31 45 6 87 30 142 86 31 25 56 63 23 23 6 11 6	2 2 12 18 25 31 7 11 6 6 6 11 6	21 21 149 369 440 824 1,249 1,455 1,844 1,700 2,060 2,070 2,359 2,354 2,184 1,996 1,597 1,455 1,374 1,119 1,124 870 852 512 473 464 410 337 357 226 238 202 118 135 91 80 23 17 23 11 17 26 66
Total	9,430	7,477	14,599	3, 150	3,201	1,512	722	158	40,249

Table 54.--Age-length composition of haddock landed from 5Z (East and West combined), June 1956, in hundreds of fish

Length	 2	3	Y 4	e a r s	of a	g e	8	9+	Total
35 67 89 40 1 2 3 4 5 6 7 8 9 5 0 1 2 3 4 5 6 7 8 9 6 0 1 2 3 4 5 6 7 8 9 6 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 9 7 8 7 8	104 221 590 611 1,310 1,812 1,623 1,363 1,324 943 650 373 304 107	39 69 33 199 572 248 310 781 703 1,162 626 941 650 758 737 314 107 49 24 16 1 13 19	140 323 354 913 520 805 1,244 1,028 1,833 1,647 1,643 1,049 750 349 238 282 107 4 47 13 1	43 1 97 104 57 222 279 333 431 202 444 225 353 233 101 63 100 114 23 94 25 3 4	32 68 60 133 136 182 272 223 360 290 233 268 184 251 257 121 115 69 161 180 41 18 16 2	52 40 32 113 28 104 48 42 123 127 123 137 94 54 76 92 82 59 69 36 10 62 9 4 2 4 2	25 13 10 57 3 47 27 38 115 40 30 82 70 10 31 2 4 1	1 13 24 32 36 4 4 9 5 4 6 8 8	104 221 629 680 1,343 2,011 2,335 1,934 2,031 2,637 1,905 2,341 2,271 2,232 2,540 2,695 2,759 2,230 2,387 1,800 1,889 1,318 1,111 803 765 575 487 510 468 309 267 276 311 301 192 142 42 109 8 8 8 8 8 8 8
Total	11, 335	8, 371	17,626	3, 551	3,772	1,624	605	158	47,042

Table 55.--Age-length composition of haddock landed from 5Z (East and West combined), July 1956, in hundreds of fish

Length (cm.)	2	3	<u>Y</u>	e a r s	of a	де 7	8	9+	Total
32 34 56 78 940 12 34 56 78 960 12 34 56 78 960 12 34 56 78 970 12 34 56 78 980 10 10 10 10 10 10 10 10 10 1	16 37 89 168 335 518 875 1,186 1,341 1,256 929 904 498 236 176 231 38	59 85 65 136 359 179 449 532 780 1,223 485 742 596 511 359 231 83 77 51 38 4 13	124 315 277 702 662 579 1,078 881 1,335 1,021 907 936 806 815 557 488 242 224 157 71 10 5 17 9	103 	74 27 62 78 69 114 197 231 133 176 150 179 96 81 74 34 75 71 21 17 23 7	77 12 14 72 13 79 38 47 79 116 98 94 52 44 50 52 53 30 36 17 15 26 1 2 2 2	19 22 38 3 4 19 42 57 25 17 50 35 16 13 10 3 1 1	1 1 8 19 17 17 7 11 18 2 1 5 6 2 4	16 37 89 168 335 577 960 1,251 1,739 1,477 1,739 1,423 1,752 1,978 1,848 1,954 1,679 1,513 1,028 1,058 7,155 1,028 1,058 7,156 443 390 370 208 213 1143 179 137 107 86 86 86 86 86 86 86 86 86 86
Total	8,833	7,070	12,221	2,478	2,451	1,123	405	119	34,700

Table 56.--Age-length composition of haddock landed from 5Z (East and West combined), August 1956, in hundreds of fish

1 2 3 4	5	6				
29 26 32 88 1 225 530 117 942 1,605 430 1,598 584 117 2,612 108 110 2,319 185 88 2,564 794 108 2,031 1,001 124 2,076 370 478 1,524 962 333 1,049 618 582 1,380 1,121 603 523 768 1,153 166 249 1,161 134 522 808 124 89 1,333 338 772 115 839 68 121 526 41 382 26 385 25 300 20 193 141 77 65 13 17 33	69 1 88 275 312 159 131 149 245 198 180 99 75 70 50 41 22 14 19 25 1	50 	25 22 50 14 12 63 49 41 3 15 13 19 4 7 7 7 5 4 2 3	8 44 8 9 31 13 17 1 3 2	9+ 10 2 17 17 1 2 2 2 2	Total 29 58 88 226 647 942 2,035 2,299 2,830 2,592 3,466 3,156 2,993 2,820 2,249 3,154 2,532 1,851 1,858 1,776 1,421 1,297 1,159 702 643 473 539 326 225 182 166 142 78 93 107 55 51 14 9 10 5 9 5

Table 57.--Age-length composition of haddock landed from 5Z (East and West combined), September 1956, in hundreds of fish

Length _					Y e a r	s of	age 7		0:	
(cm.)	1	2	3	4	5	6	-7	8	9+	Total
34 56 78 90 12 34 56 78 90 12 34 56 78 90 12 34 56 78 90 12 34 56 78 90 70 12 34 56 78 90 78 90 90 90 90 90 90 90 90 90 90 90 90 90	23	28 31 279 322 1, 243 1, 837 3, 192 3, 355 4, 518 4, 064 3, 150 2, 733 1, 909 1, 234 325 149 58 83 51	39 186 277 287 126 1,303 1,207 505 917 825 1,044 414 213 278 57 160 82 74 48 13 26 13 15	55 51 63 60 68 328 970 518 478 735 540 483 414 491 300 204 225 110 127 144 81 1	150 -53 144 149 58 55 76 137 150 106 63 38 64 57 51 23 22 34 27	10 45 35 52 87 70 29 36 39 84 48 115 32 106 103 91 26 69 16 84 2	9 9 18 6 13 32 44 51 10 29 22 16 5 22 6 14 2 4	20 4 13 30 1 13 21 2 2 2 4	7 17 15 15 1 7 1 1 2	51 31 279 361 1,243 2,023 3,524 3,693 4,707 5,541 5,339 4,133 3,704 2,806 1,270 1,241 1,070 716 690 745 650 563 359 366 297 287 3166 297 217 417 428 438 448 459 459 468 468 470 470 470 471 471 471 471 471 471 471 471
Total	2.3	32,739	8 109	7,047	1,457	1,179	312	112	79	51,057

Table 58.--Age-length composition of haddock landed from 5Z (East and West combined), October 1956, in hundreds of fish

Length (cm.)		2	3	4	7 e a r 5	s of	age 7	8	9+	Total
35 6 7 8 9 40 1 2 3 4 5 6 7 8 9 60 1 2 3 4 5 6 7 8 9 70 1 2 3 4 5 6 7 8 9 80 1 2 3 4 5 6		41 131 171 440 832 1,047 1,689 1,327 1,635 1,278 1,589 1,189 716 662 262 192 197 126 28	4 21 63 20 162 35 79 74 140 170 94 206 257 467 260 139 78 184 15 18 24 9	88 7 3 240 79 218 262 188 405 334 485 332 400 370 232 263 111 103 85 53 13 10 16	1 7 40 4 96 50 138 137 155 224 173 169 147 201 61 130 92 98 37 40 16 10 22 5	2 13 60 37 57 79 59 89 169 101 76 129 105 119 41 47 32 32 27 44 20 10 15	33 18 24 47 124 19 47 71 12 41 23 63 21 53 15 5 13 1 2	12 19 19 30 20 10 13 5 11	9	45 160 234 440 852 1,047 1,689 1,489 1,758 1,357 1,671 1,332 1,133 875 690 809 902 942 698 755 797 700 634 528 680 407 356 381 327 211 152 102 105 80 80 80 80 80 80 80 80 80 80 80 80 80
Total	8 1	3,552	2,529	4,297	2,053	1,363	641	145	32	24,620

Table 61.--Age-length composition of haddock landed from 5Z (East and West combined), January 1957, in hundreds of fish

Length (cm.)	1	2	3	Y	ear:	s of	age 7	8	9+	Total
35 6 7 8 9 40 1 2 3 4 5 6 7 8 9 50 1 2 3 4 5 6 7 8 9 6 7 8 9 6 7 8 9 6 7 8 9 7 8 9 8 9 7 8 9 8 9 8 9 8 9 8 9 8	4	29 26 64 98 191 441 637 676 816 865 935 782 624 429 240 132 146 70 28	4 3 26 54 53 24 107 102 83 248 188 413 147 122 81 84 12 12 23 7	30 1 179 76 233 187 97 281 323 445 276 361 249 230 93 63 62 48 15 7	1 54 11 36 24 113 118 162 193 179 191 185 155 52 89 51 87 46 29 20 5 29 5	1 2 7 59 28 80 76 44 135 122 85 72 75 97 145 29 63 15 43 14 34 21 14 15	34 12 56 31 118 18 34 64 15 42 40 51 45 33 17 9 5 7	11 18 14 37 27 4 23 5 3 16 5 10 2	9 4 3 10 8 3 4 8 8 4 8	33 33 33 90 98 196 441 637 730 846 918 960 890 906 642 733 545 680 618 650 716 633 662 508 640 508 356 269 243 296 258 134 150 71 140 52 43 53 65 65 71 86 86 86 86 86 86 86 86 86 86
Total	4	7,229	1,806	3,476	1,835	1,276	647	176	68	16,517

Table 62, -- Age-length composition of haddock landed from 5Z (East and West combined), 1956 Haddock Year, in hundreds of fish

Table 63.--Age-length composition of haddock landed from 5Y North, Spring 1956, in hundreds of fish

Length			Y e a	r s	o f	a g e		
(3 cm.	3	4	5	6	7	8	9+	Total
groups)	<u></u>	4				0	9+	Total
33	42							42
	443							443
9	634	211						845
42	734	661						1,395
5	558	766	70					1,394
6 9 42 5 8	156	1,147	140					1,443
51	134	1,347	148	150	29			1,808
4 7	41	478	271	182	8.0	20		1,072
7		227	250	457	114			1,048
60		72	97	363	97	48		677
3			50	276	100		25	451
3 6 9			60	76	75	15	15	241
9			12	24	36		24	96
Total	2,742	4,909	1,098	1,528	531	83	64	10,955

Table 64. -- Age-length composition of haddock landed from 5Y North, Summer 1956, in hundreds of fish

Length			<u>Y</u> е а	rs	o f	a g e			
(3 cm. groups)	2	3	4	5	6	7	8	9+	Total
36	6	6							12
9	26	59							85
42 5 8		227	59						286
5		236	409	7					652
8		92	541	85					718
51		43	435	145	36				659
4 7		20	221	143	74	62			520
		7	124	153	127	14		7	432
60		6	12	74	126	69	40	~ ~	327
3				52	65	73	26		216
3 6 9				10	35	55	15	15	130
				5	24	28	10	10	77
72					11	16	7	7	41
5 8								21	21
8							1	1	2
Γot al	32	696	1,801	674	498	317	99	61	4, 178

Table 65.--Age-length composition of haddock landed from 5Y North, Fall 1956, in hundreds of fish

Length			Y e a	r s	o f	a g e			
(3 cm. groups)	2	3	4	5	6	7	8	9+	Total
36 9 42 5 8 51 4 7 60 3 6 9 72 5	16 50 26 4 2	28 96 73 53 59 20 7 5	51 160 190 161 62 47 5	2 13 56 62 54 41 34 10 5	1 23 51 49 54 30 11 4	3 14 5 14 22 15 3 5	3 3 5 4 5 2 1	3 4 5 4 4	16 78 122 131 228 305 269 191 153 112 71 41 16
Total	98	341	677	280	224	81	23	21	1,745

Table 66. -- Age-length composition of haddock landed from 5Y North, Winter 1956, in hundreds of fish

Length			Y e	ars	o f	a g	e	
(3 cm. groups)	22	3	4	5	6	7	8	Total
36 9 42 5 8 51 4 7 60 3 6 9 72 5	5 30 60	4 7 142 119 80 44 21	14 85 159 172 104 32	11 21 43 49 42 27 6	16 21 21 16 11	7 21 21	16 6	9 30 67 156 215 239 237 175 113 84 69 22 17
Total	95	417	566	199	92	49	22	1,440

Table 67.--Age-length composition of haddock landed from 5Y North, 1956 Haddock Year, in hundreds of fish

Length			<u>Y</u> •	ars	o f	a g	e		
(3 cm.	9	3	A	5	6	7	8	9+	Total
groups)	2	<u> </u>	4	<u>ə</u>	0		8	9+	Total
33		42							42
6	27	453							480
9	106	721	211						1,038
42	86	1,064	720						1,870
5	4	1,009	1,240	79	1				2,333
5 8	2	420	1,933	249					2,604
	2	316	2,131	349	186	29			3,011
51		125		497	279	145	20		
4 7			1,032				20	7	2,098
		35	517	500	635	149	3	7	1,846
60		11	163	261	554	171	107	3	1,270
3			5	178	416	208	31	25	863
6 9			1	107	162	173	34	34	511
9				28	75	79	15	39	236
72				3	26	19	15	11	74
5 8					8	5	1	25	39
8							1	2	3
Total	225	4,196	7,953	2,251 2	2, 342	978	227	146	18,318

Table 68. -- Age-length composition of haddock landed from 5Y South, Spring 1956, in hundreds of fish

Length			Y e a	r s	o f	a g e		
(3 cm.	0	4	-	0		0	0	m . 1
groups)	3	4	5	6	7	8	9+	Total
30	7							7
6	42							42
9	289	82						371
42	384	691	43					1,118
5	403	1,978	148	3	1	1		2,534
3 6 9 42 5 8	312	3,127	220	145	30			3,834
51	75	1,525	634	477	185	34		2,930
4	20	806	372	539	124			1,861
4 7	7	391	317	504	205	38		1,462
60		109	186	509	220	67		1,091
			105	316	158	70		649
6			75	111	75	25		286
3 6 9				52	70	18	35	175
72				29	28			57
72 5 8							19	19
8							4	4
81							4	4
Total	1,539	8,709	2,100	2,685	1,096	253	62	16,444

Table 69. -- Age-length composition of haddock landed from 5Y South, Summer 1956, in hundreds of fish

ength cm.			Y e a	r s	o f	a g e	
roups)	3	4	5	6	7	88	Total
39	6	12					1
42	52	60					11
42 5 8	31	428					45
8		410					41
51			123	254	62		4:
4	40	81	162	83	42		4
4 7		217	48	121	48		4:
60		26	51	116	31	13	2
3			20	102	142		2
3 6 9			28	70	83		18
			55		28		8
72				38			
5					2	2	
otal	129	1,234	487	784	438	15	3,08

Table 70. -- Age-length composition of haddock landed from 5Y South, Fall 1956, in hundreds of fish

Length			Years of age						
(3 cm. groups)	2	3	4	5	6	7	8	9+	Total
36		16							16
9	5	58							63
42 5 8	57	134	114	38					343
5		241	723	80					1,044
8		374	830	259	106				1,569
51	12	23	576	471	47				1,129
4		118	302	192	74	74		15	775
4 7		56	225	323	140	28		14	786
60			134	253	134	90	29		640
3			31	104	189	104	10	10	448
3 6 9				111	78	78		63	330
9				13	13	33	20	7	86
72						59			59
5						14			14
8						7			7
Total	74	1,020	2,935	1,844	781	487	59	109	7,309

Table 71. -- Age-length composition of haddock landed from 5Y South, Winter 1956, in hundreds of fish

Length		Years of age										
(3 cm. groups)	2	3	4	5	6	7	8	9+	Total			
39 42 5 8 51 4 7 60 3 6 9 72 5	9 113 94 21	19 212 407 246	23 246 439 223 118 41 11	43 11 73 54 72 34 15	55 65 31 46 22	8 18 2 2	2	1	9 132 329 717 696 351 237 144 91 45 37 5			
Total	237	884	1,101	321	219	30	2	1	2,795			

Table 72. -- Age-length composition of haddock landed from 5Y South, 1956 Haddock Year, in hundreds of fish

Length			<u>Y</u> e	a r s	o f	a g e			
(3 cm. groups)	2	3	4	5	6	7	8	9+	Total
30 3 6 9 42 5 8 51 4 7 60 3 6 9 72 5 8	14 170 94 21 12	7 58 353 589 887 1,093 344 178 63	94 865 3,152 4,613 2,540 1,412 951 310 42	81 228 522 1,239 799 742 562 263 229 87	3 251 778 751 830 790 653 281 65 67	1 30 247 240 281 341 404 244 149 89 18	1 34 38 109 80 25 38 2 2	15 14 10 63 42 1 19 4	7 58 461 1,705 4,366 6,530 5,194 3,395 2,919 2,112 1,452 842 381 159 39 11 4
Total	311	3,572	13,979	4,752	4,469	2,051	329	172	29,635

Table 73.--Age-length composition of haddock landed from 5Y (North and South combined) Spring 1956, in hundreds of fish

Leng	gth			Yea	ars of	age				
(3-cm.	groups)	2	3	4	5	6	7	8	9+	Total
30 33 36 39 42 45 48 51 54 57 60 63 66 69 72 75 78		7	42 485 923 1,118 961 468 209 61 7	293 1,352 2,744 4,274 2,872 1,284 618 181	43 218 360 782 643 567 283 155 135	3 145 627 721 961 872 592 187 76 29	1 30 214 204 319 317 258 150 106 28	1 34 20 38 115 70 40	25 15 59 19 4 4	7 42 485 1, 216 2, 513 3, 928 5, 277 4, 738 2, 933 2, 510 1, 768 1, 100 527 271 57 19 4
Total		7	4, 274	13, 618	3,198	4, 213	1,627	336	126	27,399

Table 74. -- Age-length composition of haddock landed from 5Y (North and South combined) Summer 1956, in hundreds of fish

Length				Years	of age				
(3-cm. groups)	2	3	4	5	6	7	8	9+	Total
27 30 33 36 39 42 45 48 51 54 57 60 63 66 69 72 75 78	6 26	6 65 279 267 92 43 60 7 6	12 119 837 951 435 302 341 38	7 85 268 305 201 125 72 38 60	290 157 248 242 167 105 24 49	62 104 62 100 215 138 56 16 2	53 26 15 10 7 2	7 15 10 7 21	12 103 398 1,111 1,128 1,098 928 866 564 480 311 160 79 25 2
Total	32	825	3,035	1,161	1,282	755	114	61	7,265

Table 75.--Age-length composition of haddock landed from 5Y (North and South combined) Fall 1956, in hundreds of fish

Length				Years	of age				
(3-cm. groups)	2	3	4	5	6	7	8	9+	Total
33 36 39 42 45 48 51 54 57 60 63 66 69 72 75 78 81	16 55 83 4 2 12	16 86 230 314 427 82 138 63 5	114 774 990 766 463 287 181 36	38 82 272 527 254 377 294 138 121 18	1 106 47 97 191 183 243 108 24 4	77 42 95 118 100 48 62 19 7	3 32 15 4 25 2	15 14 3 10 67 12 4 4	32 141 465 1,175 1,797 1,434 1,044 977 793 560 401 127 75 25
Total	172	1,361	3,612	2,124	1,005	568	82	130	9,054

Table 76.--Age-length composition of haddock landed from 5Y (North and South combined) Winter 1956, in hundreds of fish

Length (3-cm. grou	ıps) <u>2</u>	3	4	Years 5	of age	7	8	9+	Total
36 39 42 45 48 51 54 57 60 63 66 69 72 75 78 81	5 39 173 94 21	4 26 354 526 326 44 21	37 331 598 395 222 73 11	54 11 94 97 121 76 42 25	55 65 47 67 43 16 11	7 21 29 18 2	16 8	1	9 39 199 485 932 935 588 412 257 175 114 59 22
Total	332	1,301	1,667	520	311	79	24	1	4, 235

Table 77.--Age-length composition of haddock landed from 5Y (North and Scuth combined) 1956 Haddock Year, in hundreds of fish

Leng					Years	of age				
(3-cm.	groups)	2	3	4	5	6	7	8	9+	Total
30 33 36 39 42 45 48 51 54 57 60 63 66 69 72 75 78 81		7 27 120 256 98 23 12	42 511 1,074 1,653 1,896 1,513 660 303 98	305 1,585 4,392 6,546 4,671 2,444 1,468 473 47	81 307 771 1,588 1,296 1,242 823 441 336 115	4 251 964 1,030 1,465 1,344 1,069 443 140 93 8	1 30 276 385 430 512 612 417 228 108 23 7	1 34 20 41 216 111 59 53 17 3	15 21 3 35 97 81 12 44 6 4	7 42 538 1,499 3,575 6,699 9,134 8,205 5,493 4,765 3,382 2,315 1,353 617 233 78 14 4
Total		543	7,761	21,932	7,003	6,811	3,029	556	318	47,953

Table 78.--Haddock abundance (catch-per-day, 100's of pounds), fishing effort (standard trawler days fished) and catch (100's of pounds landed) for 5Z, 1956 Haddock Year (see text for explanation)

Seasons	5Z East			5Z West			5Z Total		
and	Catch		Days	Catch		Days	Catch		Days
m onths	per day	Catch	fished	per day	Catch	fished	per day	Catch	fished
SPRING	150	50.040	0.00	0.5	0.4 5.40	0.01	110	00 001	5 10
Feb	178	58,642	329	65	24,749	381	117	83, 391	710
Mar	171	50,821	297	124	23, 851	192	153	74,672	489
Apr	140	7,777	56	134	24,625	184	135	32, 402	240
Total	172	117,240	682	124	73, 225	591	150	190,465	1273
10141	1.5	111,510	002	101	. 0, 220	001	100	100, 100	15.0
SUMMER									
May	141	31,760	225	133	67,927	511	135	99,687	736
June	111	28,745	259	138	81,857	593	1 30	110,602	852
July	106	42,292	399	92	39,068	425	99	81,360	824
Total	117	102,797	879	127	188,852	1486	123	291,649	2365
FALL									
Aug	112	45,706	408	145	53,417	368	128	99,123	776
Sept	128	22,583	176	166	83, 640	504	156	106, 223	680
Oct	139	36,079	260	143	46, 391	324	141	82, 470	584
OCI	133	30,019	200	143	40,551	024	141	02, 410	304
Total	126	104, 368	828	152	183,448	1207	141	287,816	2035
		., .							
WINTER									
Nov	156	17,135	110	240	45,630	190	209	62,765	300
Dec	174	14,897	86	64	49,843	77 9	75	64,740	865
Jan	63	12,301	195	174	35,311	203	120	47,612	398
Total	120	44,333	369	174	130,784	752	156	175,117	1121
YEAR	134	368,738	2750	144	576, 309	4036	139	945,047	6794
IEAR	134	300,730	2130	144	310,309	4030	139	340,041	0134

